



ANNUAL REPORT

2022



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ALICANTE unit



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European Laboratory for Learning and Intelligent Systems

Annual Report

2022



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Contents

1
Presentation
p. 7

2
About
ELLIS Alicante
p. 11

About
ELLIS
Europe **3**
p. 19

4 Unit
ELLIS Alicante
p. 25

Research
areas **5**
p. 37

6 Research
projects
p. 41

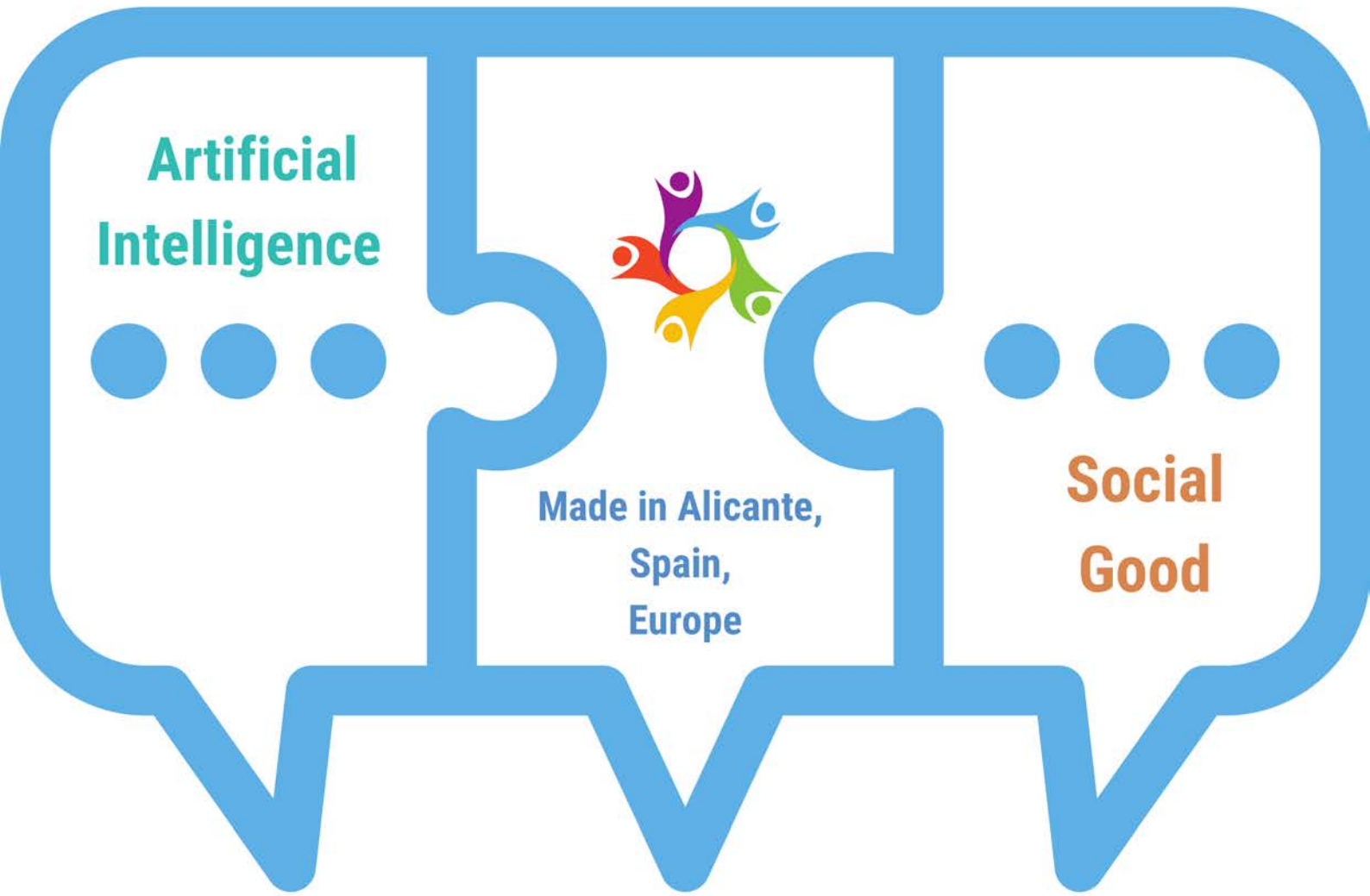
Outreach
activities and
results **7**
p. 61

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8 Collaborations
and alliances
p. 101

Awards and recognitions **9**
p. 115

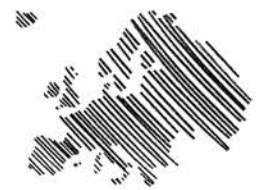
Funding
and
sponsorships **10**
p. 119
5



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1. PRESENTATION

ANNUAL
REPORT
2022



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Letter by the President of the Board



Christof Beaupoil

President of the Board of Trustees of ELLIS Alicante

Dear friends:

We present you the 2022 Activity Report of the ELLIS Unit Alicante Foundation. In it you will find information about our work during our second year of life.

Throughout 2022 we have consolidated an excellent working team and laid the operational foundations on which to grow the foundation, both in size and impact, in the years to come. At the end of 2021, once we returned to normality after the COVID-19 pandemic, we inaugurated our headquarters in the Science Park of the University of Alicante and welcomed the first employees of the Foundation. In 2022, four new predoctoral researchers joined the ELLIS PhD program, two of them for whom we are their secondary ELLIS unit. In addition, we have had the enriching contributions of two visiting researchers.

Thanks to this new talent, we have launched 2 new research projects, which have been added to the existing ones and have already yielded relevant results. We have also continued our intense work of scientific-technological dissemination with numerous invited lectures and collaborations with the media.

In 2022 it is worth mentioning the organisation of the 2nd ELLIS Doctoral Symposium (ELLIS Doctoral Symposium - EDS22), which put ELLIS Alicante in the spotlight of the ELLIS network and was a resounding success in terms of participation. This international symposium, unique in Europe, brought together more than 150 PhD students and experts in Artificial Intelligence from 18 countries. Focusing on 'Artificial Intelligence for Social Good'. The five-day event marked a unique opportunity for young research talent from the ELLIS network to meet with world-renowned experts and innovative technology companies to learn and generate debate on research and developments in AI for Social Good.

In these pages we summarise our work in 2022, based on partnership and cooperation. I convey our enormous gratitude to all the people and entities that trust and collaborate with us. Your strong support to ELLIS Alicante is undoubtedly a commitment to invest in the future, defend European values and contribute to progress through people-centred Artificial Intelligence research. Thanks to this support we can work to define the future of Artificial Intelligence from the premise of Social Good.

Introduction

The ELLIS Alicante Unit Foundation (hereafter ELLIS Alicante) is a private non-profit foundation that is creating a world-class research team focused on Artificial Intelligence (AI) research for the Social Good, analysing and addressing the ethical implications of AI and the relationship between people and intelligent systems. Our name, The Institute for Human(ity) Centric AI (IHCAI), defines our vision: we strongly believe in the potential of Artificial Intelligence to contribute to progress, i.e. to improve the quality of life of all people on the planet, all other living beings and the planet itself.



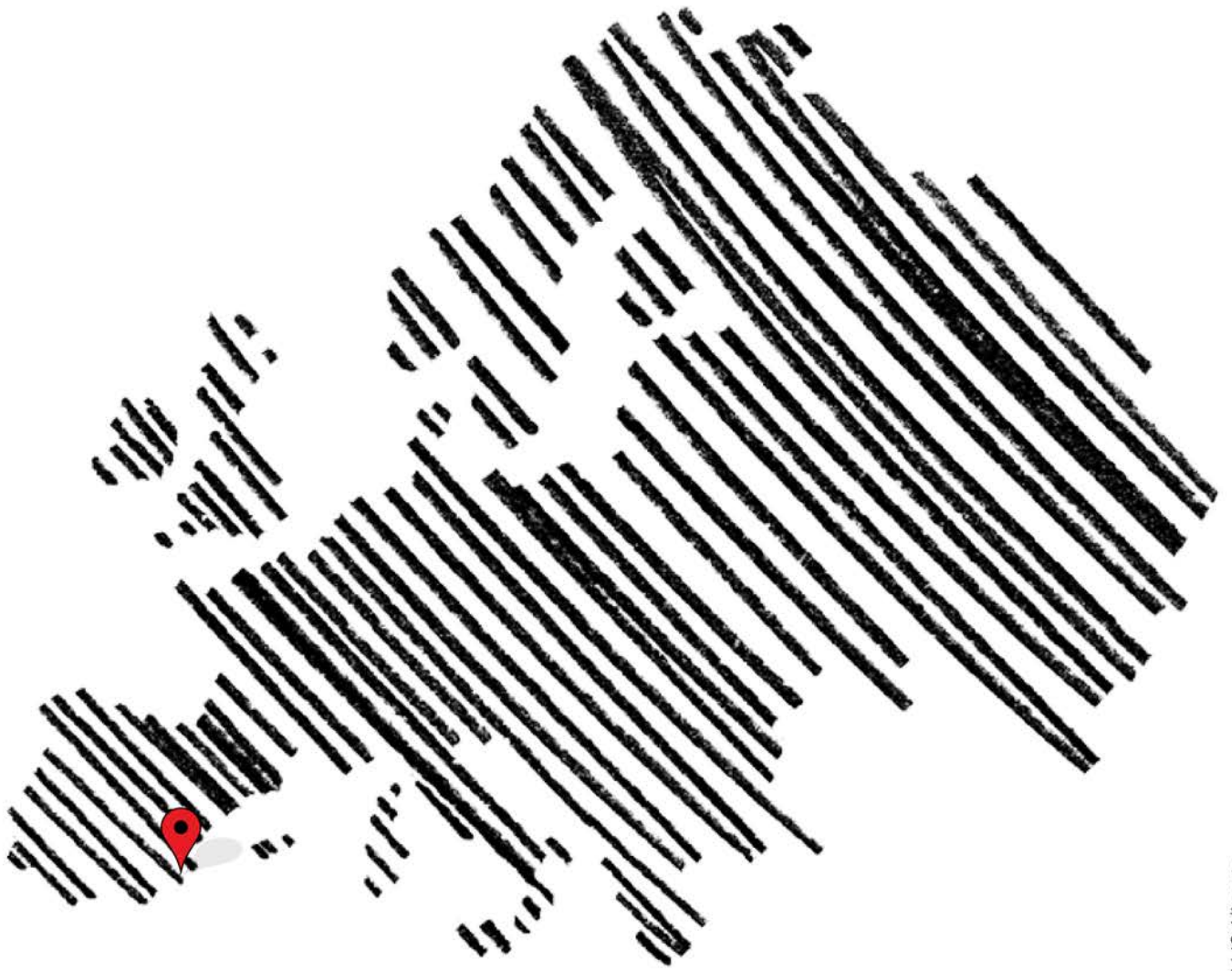
Nuria Oliver

Director of ELLIS Alicante

ELLIS Alicante is one of the 39 ELLIS units, the European network of scientific excellence in Artificial Intelligence, and is the only ELLIS unit created from scratch, with the spirit of a scientific startup.

A large graphic featuring the letters 'AI' in a glowing, white, sans-serif font. The background is a dark blue field filled with a complex network of white lines and dots, resembling a neural network or a data visualization. The dots are of varying sizes and brightness, and the lines connect them in a web-like pattern.

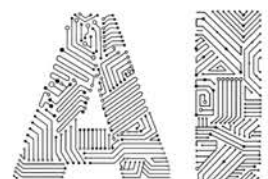
AI



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2. ABOUT ELLIS ALICANTE

ANNUAL
REPORT
2022



Purpose



VISION

The ELLIS vision, to which ELLIS Alicante adheres, entails conducting free and open research of excellence for Europe to influence the way modern AI is changing the world. Establish an open and cooperative system that allows basic research to achieve practical application, with positive economic and social impact.

To be the European and world reference in AI research by and for people. We are the only ELLIS unit dedicated exclusively to this topic.

An AI revolution by and for the people.

MISSION

ELLIS is on a mission to become Europe's leading employer and generator of excellent research talent in modern Artificial Intelligence, i.e. AI techniques based on learning from data.

In addition to investing in established research talent, ELLIS focuses on attracting the world's brightest young minds to Europe through its ELLIS PhD program, to train the next generation of excellent researchers who will continue to drive our vision into the future.

ELLIS Alicante shares the mission of ELLIS Europe, to which it adds a focus on Artificial Intelligence for Social Good.

ELLIS Alicante aims to attract research talent of excellence to its area of influence: Alicante, Valencia, Spain, Europe.

Values

1

We strive for excellence and pursue our mission with passion.

2

We embrace calculated risks and new approaches. We have an entrepreneurial spirit that welcomes innovation, diversity of ideas and innovative thinking.

3

We are truthful, fair and trustworthy in all aspects of our work. We hold ourselves and our partners to the highest ethical standards. We expect others to do the same.

4

We understand that our ultimate success depends on that of our partners and funding agencies. Our humility will be key to building legitimate and trusting relationships.

5

We value each of our team members as individuals, but we believe that we achieve the best results by working together and being team players.

6

We encourage the enjoyment of work as a key element to foster creativity and motivation.

Goals 2022



2

GOAL

The Foundation aims to contribute to excellence in research in Europe to enable Europe to be a globally prominent player in Artificial Intelligence, as an engine of change in the world. To achieve this, it will need to offer globally competitive salaries for research staff, flexibility to collaborate with companies, to set up companies and take up positions in companies, and to collaborate with other research centres of excellence, both in projects and in staff exchange and other collaborative activities.

1

GOAL

Conduct scientific research of excellence in Artificial Intelligence with positive social impact.

3

GOAL

Contribute to generate a positive economic and social impact in the preferred territorial area, attracting, retaining and training excellent research talent and carrying out socially relevant research that complements specific industry interests.

Beneficiaries of our activity

At ELLIS Alicante we firmly believe in the power of technology as a generator of progress and universal welfare. The actions of the foundation must benefit society in its broadest sense.



Research
in AI



Social
Innovation



Progress



Social
Good



Sustainable
Development

Governance

BOARD OF TRUSTEES

Responsible for the governance and representation of the Foundation, the fulfilment of its objectives and the administration and management of its assets.

President | **Christof Beaupoil**

Vice-president | **Bernhard Schölkopf**

Secretary (non-trustee) | **Victor Riera Pastor**

Trustee | **Sara Gómez Martín**

Trustee | **Elías Fereres Castiel**

Trustee | **María Victoria Carrascosa Chaques**

SCIENTIFIC ADVISORY BOARD

Composed of scientists of recognised international prestige in the research areas of ELLIS Alicante. Its function is to support the research agenda of ELLIS Alicante and to provide its expert opinion. It usually meets once a year.

Krishna Gummadi

Max Planck Institute for Software Systems

Adrian Weller

The Alan Turing Institute / Cambridge University

Emilia Gómez

European Commission Joint Research Center

Carlos Castillo

Universitat Pompeu Fabra

Bruno Lepri

Bruno Kessler Foundation

Tanzeem Choudhury

Cornell University

Ramón López de Mantaras

Consejo Superior de Investigaciones Científicas

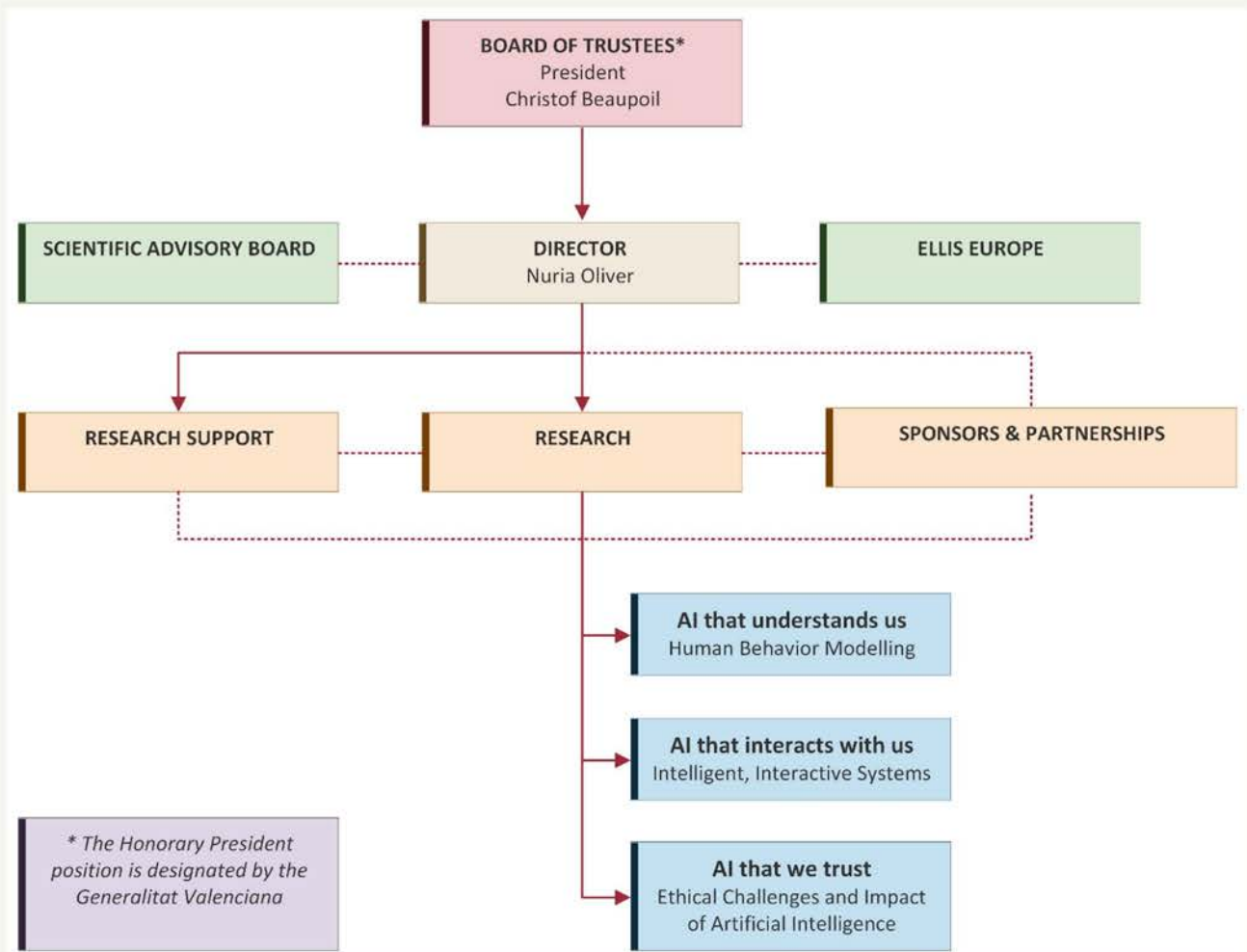
Sandy Pentland

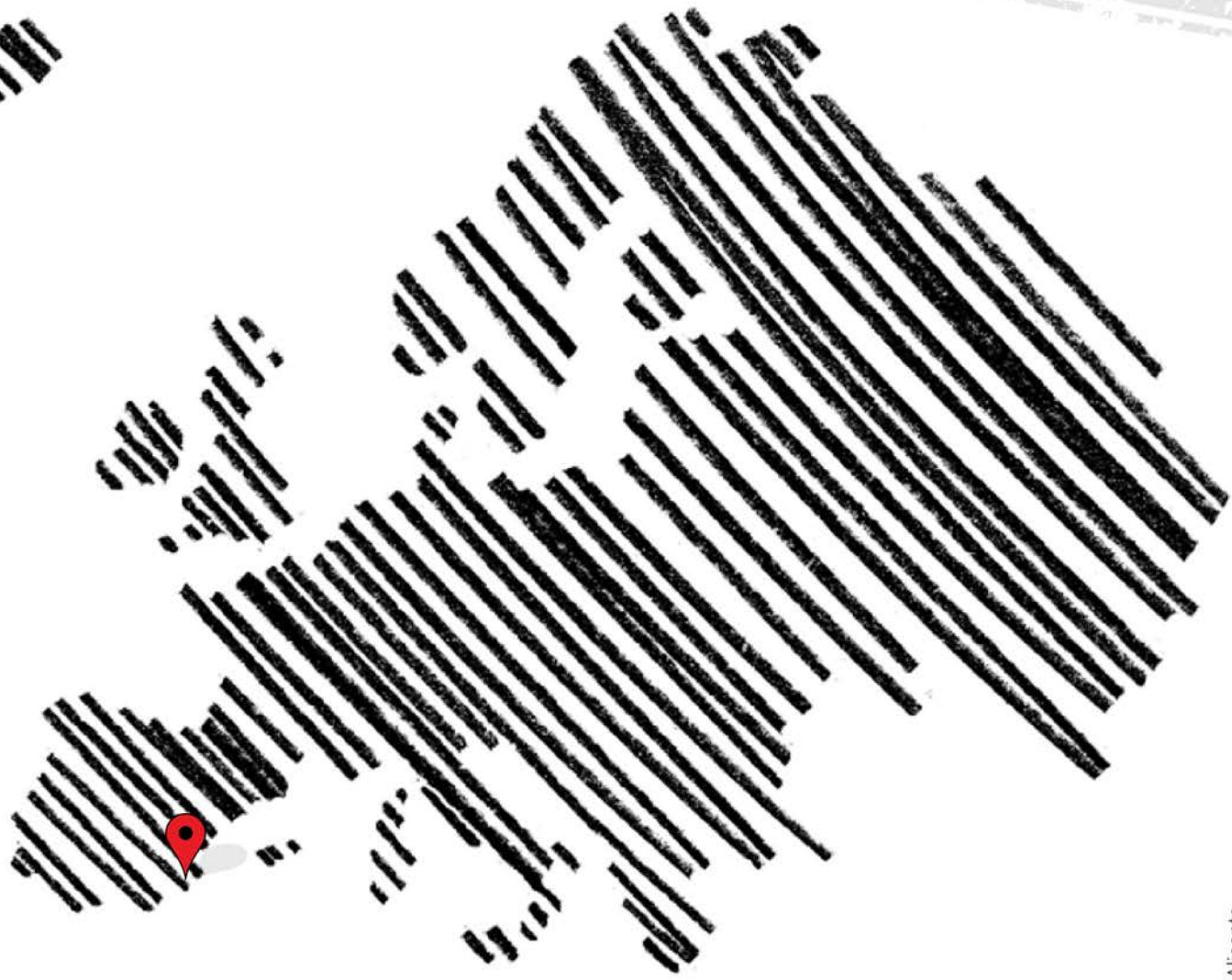
Massachusetts Institute of Technology (MIT)

ELLIS EUROPE

ELLIS Alicante is one of the 39 units of the ELLIS Europe Association distributed in 14 countries in Europe and Israel. As such, it is part of a network of research excellence composed of the forefront of the European scientific community in Artificial Intelligence working in an environment of international collaboration with the aim of making Europe a pioneering region in AI research.

ORGANISATION CHART





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3. ABOUT ELLIS EUROPE

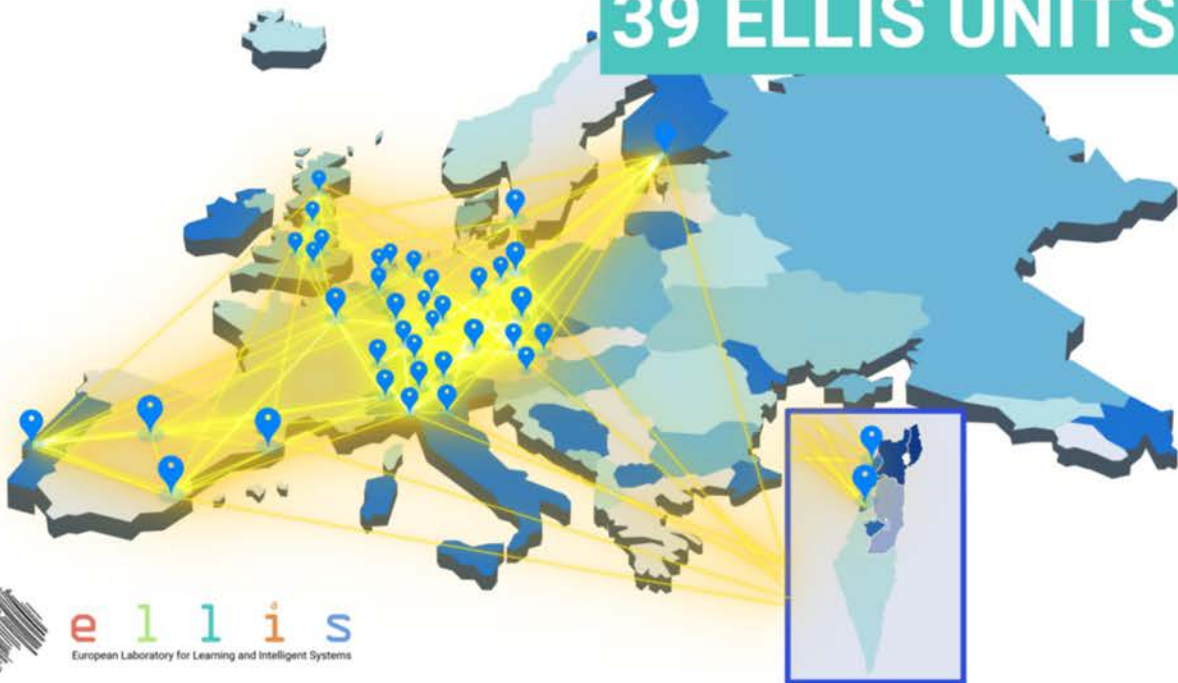
ANNUAL REPORT 2022



ELLIS Europe



39 ELLIS UNITS



Alicante	Amsterdam	Barcelona	Berlin
Cambridge	Copenhagen	Darmstadt	Delft
Edinburgh	Freiburg	Genoa	Graz
Haifa (Technion)	Heidelberg	Helsinki	Jena
Lausanne (EPFL)	Leuven	Linz	Lisbon
London (UCL)	Madrid	Manchester	Milan
Modena (Unimore)	Munich	Nijmegen	Oxford
Paris	Prague	Potsdam	Saarbrücken
Stuttgart	Tel Aviv	Trento	Tübingen
Turin	Vienna (IST Austria)	Zürich (ETH)	

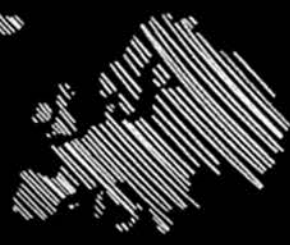
39 ELLIS Units
in Europe and Israel



www.ellis.eu

39

ELLIS Units



e l l i s
European Laboratory for Learning and Intelligent Systems

14

European countries
and Israel

14

Pan-European
doctoral programs

320

Million euros budget
for ELLIS units over the
next 5 years

12

Millions of EU funding
through the
ELISE program

ELLIS (The European Laboratory for Learning and Intelligent Systems), is an initiative of the European scientific community with a committed focus on scientific excellence, innovation and the positive social impact of Artificial Intelligence. Formally it is a non-profit association, based in Germany.

ELLIS' mission is to contribute to European technological sovereignty in Artificial Intelligence and to make Europe competitive in this strategic discipline vis-à-vis North America and Asia. To this end, ELLIS' priority is to invest in excellent research talent, creating an environment that is sufficiently attractive to attract, retain, inspire and educate the next generation of excellent researchers in modern AI.

The ELLIS strategy is also aimed at accelerating Europe's AI position vis-à-vis its natural competitors on a global scale, and is therefore based on four pillars necessary to strengthen technological excellence and sovereignty in a field of research of such competitive value in the short, medium and especially long term.

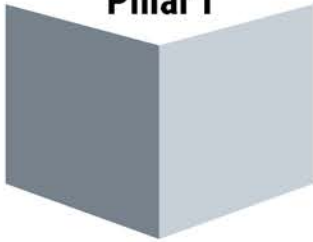
ELLIS Units are excellent research groups that commit themselves to be ambassadors of ELLIS and to fulfil the vision, mission and conditions defined by ELLIS. After several competitive selection processes, ELLIS has already selected 39 ELLIS Units in 14 European countries and Israel.

These ELLIS units include some of the best research groups in modern Artificial Intelligence, not only at European level, but worldwide, such as the universities of Oxford and Cambridge, ETH Zurich, EPFL, several Max Planck institutes or the Technion in Israel.



ELLIS Strategy

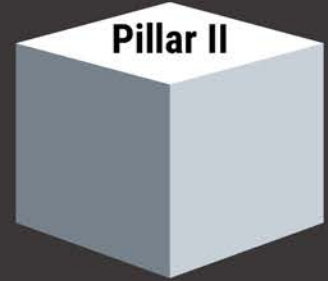
Pillar I



Attract, inspire, educate and connect

the best doctoral students in Europe through a pan-European doctoral program of international prestige.

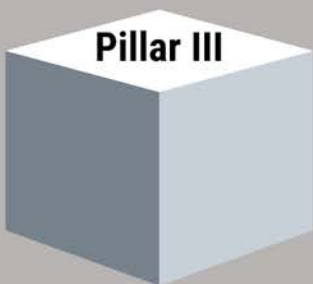
Pillar II



Connect

top European researchers through a program of ELLIS Fellows and Scholars articulated through 14 pan-European research programs dedicated to diverse topics, including basic research in theory and algorithms, applications of AI in health and climate sciences, and research in humanistic aspects of AI.

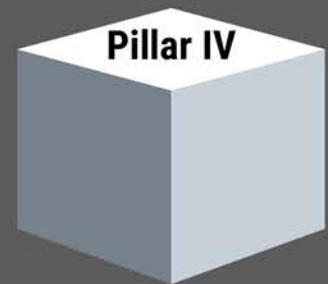
Pillar III



Create

a network of ELLIS Units located in prestigious European institutions, or created from scratch, to carry out research of excellence in modern AI in Europe, being the first support for the creation, in the medium term, of ELLIS Institutes, with a much more ambitious budget and dimension.


Pillar IV



Develop

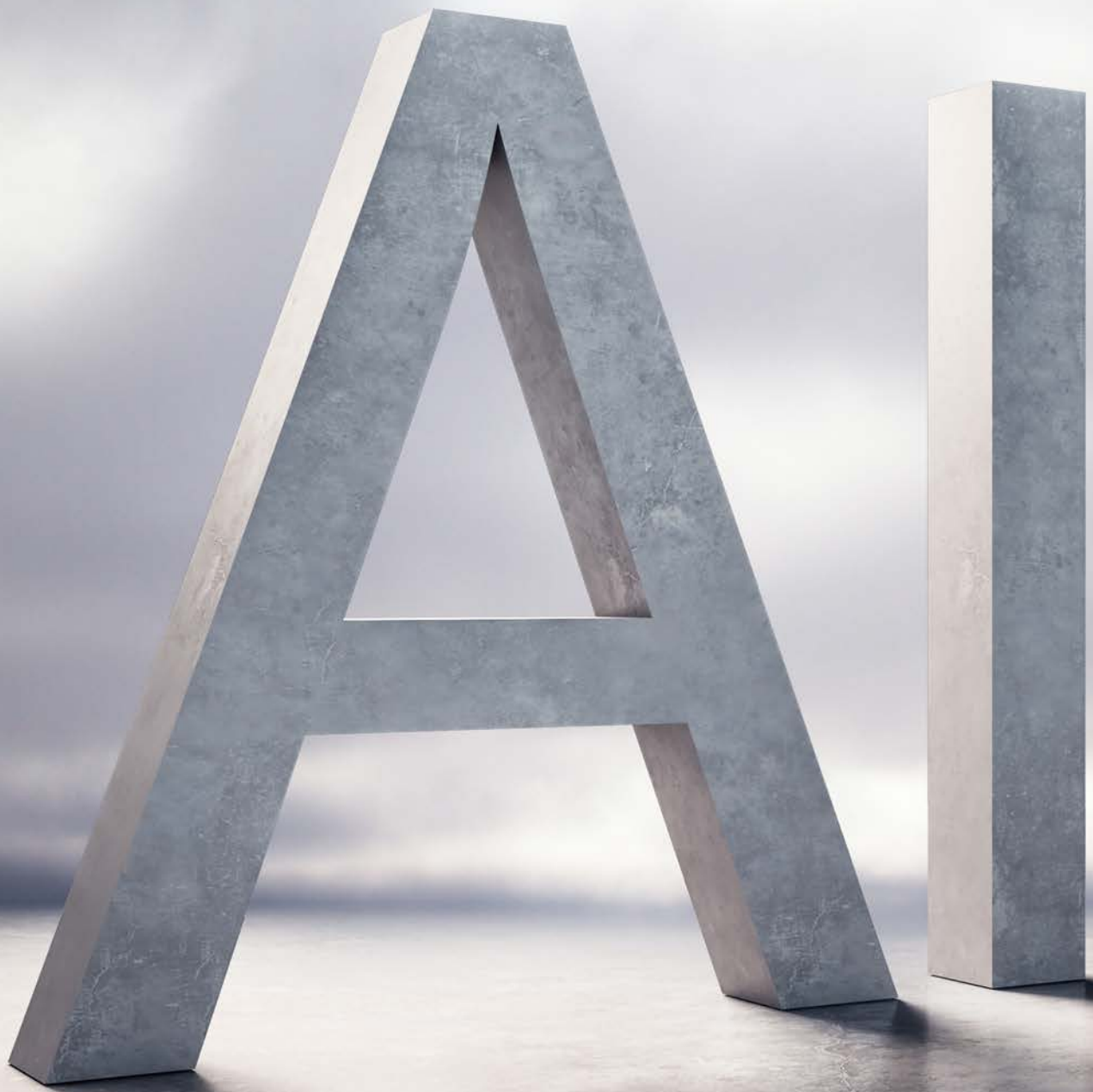
partnerships with relevant companies, leading the AI thinking at European level through interactions and collaborations with European institutions and fostering entrepreneurship and transfer of research results. In this fourth pillar, it is noteworthy that ELLIS is one of the founding partners of ADRA [1], the PPP in Europe dedicated to data, robotics and Artificial Intelligence.

[1] ADRA: European Partnership on Artificial Intelligence, Data and Robotics (Home - Ai Data Robotics Partnership (ai-data-robotics-partnership.eu))

The background of the slide is the European Union flag, featuring a blue field with twelve five-pointed gold stars arranged in a circle. The flag is shown with a slight diagonal crease, giving it a three-dimensional appearance.

"The ultimate goal of ELLIS is the creation of a network of ELLIS Institutes, located in different European countries and Israel, that are world leaders in basic research of excellence in modern AI."

Nuria Oliver



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4. ELLIS ALICANTE UNIT

ANNUAL
REPORT
2022



e l l i s
ALICANTE unit



Located in the Science Park at the University of Alicante

The ELLIS unit in Alicante is the only Spanish non-profit foundation dedicated to ethical, responsible and people-centred research of excellence in Artificial Intelligence in order to contribute to the Social Good.

Team

RESEARCHERS

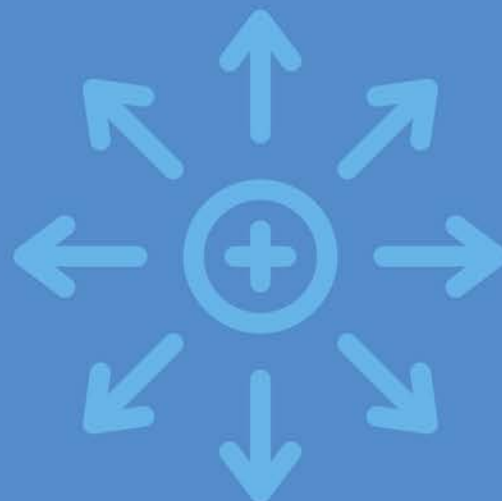
Senior, junior and predoctoral researchers of recognised international prestige. Predoctoral researchers are part of the competitive ELLIS PhD program. At ELLIS Alicante we conduct open research in collaboration with researchers from universities and other research centres.

SCIENTIFIC DIRECTION



Nuria Oliver

Scientific Director and Co-Founder of ELLIS Alicante



Team

ASSOCIATE RESEARCHERS



Bruno Lepri

*Associate Researcher and member of the Scientific Advisory Committee
FBK, Italy*



Emmanuel Letouzé

*Associate Researcher
Data-Pop Alliance & UPF, Spain*



Flora Salim

*Associate Researcher
UNSW Sydney, Australia*



Francisco Escolano

*Associate Researcher
University of Alicante, Spain*



Manuel Gomez Rodriguez

*Associate Researcher
University of Alicante, Spain*



Miguel Ángel Lozano

*Associate Researcher
University of Alicante, Spain*



Novi Quadrianto

*Associate Researcher
University of Sussex, UK*



Shirley Ogolla

*Associate Researcher
HIIG, Germany*



Thomas Hoffmann

*Associate Researcher
ETH Zürich, Switzerland*

Team

PhD STUDENTS



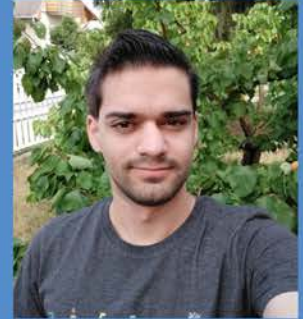
Aditya Gulati
Ph.D. Student



Adrián Arnaiz-Rodríguez
Ph.D. Student



Benedikt Höltgen
Ph.D. Student
UdTübingen, Germany



Gergely D. Németh
Ph.D. Student



Julien Colin
Ph.D. Student



Kajetan Schweighofer
Ph.D. Student
JKU Linz, Austria



Piera Riccio
Ph.D. Student

VISITING RESEARCHERS



Erik Derner
Visiting Researcher



Mona Schirmer
Visiting Researcher

Team

SUPPORT

Composed of professionals with proven skills, competencies and track record in the management of foundations and non-profit organisations, as well as in the management of science and research.



Rebeca de Miguel
Head of Operations



Cristina González
Office Manager



Members of the ELLIS Alicante team during the ELLIS 2022 Doctoral Symposium

HIGHLIGHTS



✓ 100% of scientific papers published in Q1 conferences and journals, such as NeurIPS, Science and Nature Scientific Reports

✓ 1 article in the top 8% of peer-reviewed research referenced in Altmetric

✓ Social Innovation Award granted by the Spanish Association of Foundations

✓ University Engagement Award 2022 granted by the Social Council of the University of Alicante

✓ + 50 invited lectures

✓ + 100 media appearances

✓ Partnerships and alliances with a hundred international entities

✓ Organisation of the 2nd ELLIS Doctoral Symposium

MILESTONES

We would like to highlight the following milestones achieved by this newly created Foundation to date:

1

In November 2019, the Generalitat Valenciana published the Valencian AI Strategy [1], where it commits financial support towards the creation of an ELLIS Unit in Alicante, such commitment being 1.5 million euros per year. The Generalitat Valenciana thus becomes an strategic ally, along with other European public institutions, for the achievement of the ambitious objectives of the ELLIS network at an international level, especially that of generating a European regional counterweight to retain, attract and train excellent research talent in Artificial Intelligence and thus contribute to the better economic development of our society. This commitment resulted in the presentation of a proposal for the creation of an ELLIS unit in Alicante, with the strong support of the Generalitat Valenciana as a public funding institution and the technical endorsement of the project by Dr. Nuria Oliver.

[1]

<https://presidencia.gva.es/es/web/campanyes/inteligenciaartificialcv>

2

In December 2019, after a competitive evaluation and selection process by an international scientific committee, ELLIS Europe communicated the favourable evaluation of the proposal received to create an ELLIS Unit in Alicante. ELLIS Alicante became the only ELLIS Unit in Spain from the 17 units that were approved at that time.



MILESTONES

...

ELLIS Alicante was born with the scientific mission of conducting research in Artificial Intelligence ethical, responsible and people-centred. Hence the nickname adopted by this unit: Institute for Human-centred Artificial Intelligence.

3

To achieve its mission it addresses three broad areas of basic research in Modern AI:

- (a) Artificial Intelligence to understand us, through computational modelling of human behaviour (both at the individual and aggregate level) using Artificial Intelligence techniques;
- (b) Artificial Intelligence with which we interact, through the development of interactive intelligent systems;
- (c) Artificial Intelligence we trust, by addressing the ethical implications, challenges and limitations of Artificial Intelligence systems used for decision making.

4

...

On May 25, 2020 ELLIS Alicante became the first ELLIS unit with its own legal staff when it was constituted as a foundation under the name "Fundación de la Comunitat Valenciana Unidad ELLIS Alicante" which is governed by the bylaws recorded in the public deed of incorporation of the foundation on that date, and which was registered in the Registry of Foundations of the Comunitat Valenciana, with the character of research, with the registration number 236A by Resolution of June 25, 2020 of the Autonomous Secretary of Justice and Public Administration of the Department of Justice, Interior and Public Administration.

MILESTONES



5

ELLIS Alicante is constituted as a private non-profit foundation, which is not part of the instrumental public sector of the Generalitat, and whose object and purposes, in summary, are: (a) the performance of basic scientific research of excellence in Artificial Intelligence by internationally renowned scientists employed by the ELLIS Alicante Foundation; (b) to contribute to generate a positive economic and social impact in the preferential territorial area, attracting, retaining and training excellent research talent; and (c) to contribute to excellence research in AI to boost the promotion of Europe as a prominent global player in this field.

The Generalitat Valenciana holds the honorary presidency of the ELLIS Alicante Foundation, thus expressing the commitment of promotion and cooperation adopted since its origin by the Generalitat Valenciana.

6

As a consequence of the COVID-19 pandemic, ELLIS Alicante has not been able to hire any staff or inaugurate its headquarters in the science park of the University of Alicante until October 2021. Currently, ELLIS Alicante has a General and Scientific Director, an Operations Director, an Office Manager, 9 research associates and four PhD students from the ELLIS international PhD program. These students have been the main organisers, with the support of the management team, of the II ELLIS 2022 Doctoral Symposium - EDS22 (19 -23 September 2022).

7

In December 2021, ELLIS Alicante launched its Scientific Advisory Committee (SAC) with eight prominent international personalities of great scientific-research experience in the field of Artificial Intelligence. The main function of this Committee will be to advise and guide ELLIS Alicante in the research topics and projects it carries out, as well as to propose the opening of new research lines, identify excellent talent that could be interested in joining the unit, and give visibility to the different actions that ELLIS Alicante carries out.



The members of the SAB are:



8

Krishna Gummadi, scientific director of the Max Planck Institute for Software Systems (MPI-SWS) (Munich, Germany); Adrian Weller, director of the AI Program at The Alan Turing Institute (London, UK); Emilia Gomez, principal investigator of the Human and Machine Intelligence (Humaint) at the Joint Research Centre of the European Commission (Seville, Spain); Carlos Castillo, coordinating researcher of the Web Science and Social Computing (WSSC) research group at the Universitat Pompeu Fabra (Barcelona, Spain); Bruno Lepri, director and principal investigator of the Mobile and Social Computing Lab (MobS) at the Bruno Kessler Foundation (Trento, Italy); Tanzeem Choudhury, professor of Computer and Information Science at Cornell Tech University (New York, USA); Alex "Sandy" Choudhury, professor of Computer and Information Science at Cornell Tech (New York, USA); Alex "Sandy" Kessler, director of the Mobile and Social Computing Lab (MobS) at the Bruno Kessler Foundation (Trento, Italy). Alex "Sandy" Pentland, Director of the Connection Science and Human Dynamics Laboratories at MIT (Massachusetts, USA); Ramón López de Mántaras, Research Professor at the Consejo Superior de Investigaciones Científicas (CSIC), (Madrid, Spain).

All of them share with ELLIS Alicante a vision of the positive social impact of AI. Their diverse research is aimed at inventing the future of technology-assisted well-being, through new methods and applications of AI that help to ensure beneficial outcomes for society.

9

In 2022 our team was enriched with new associated researchers, forming a team of 9, the incorporation of 2 new PhD students whose base unit is ELLIS Alicante, of 2 PhD students for whom we are secondary ELLIS unit, and the stays of 2 visiting researchers.



5. RESEARCH AREAS

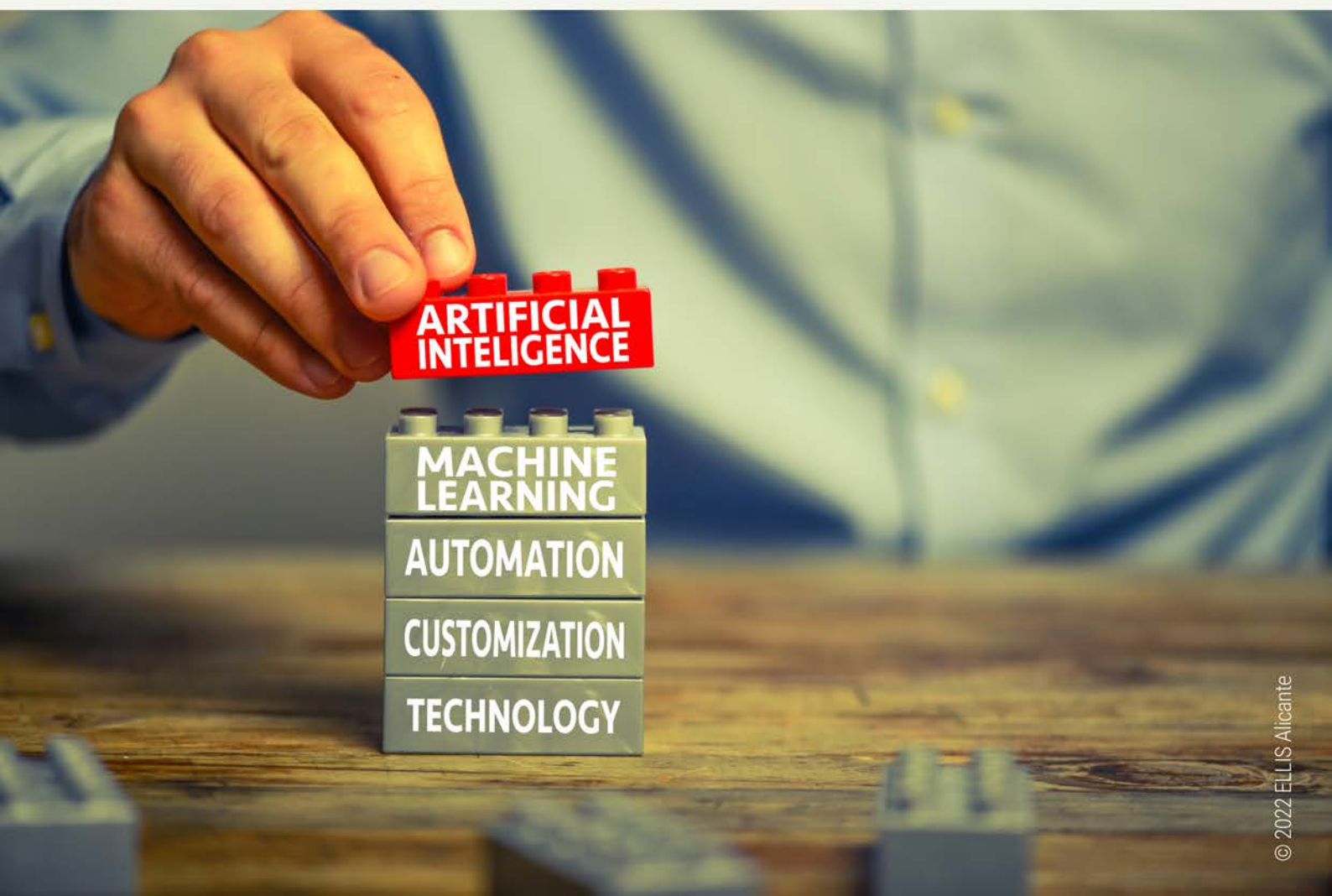
ANNUAL
REPORT
2022

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Research in ELLIS Alicante is designed to contribute to progress by studying the intersection between AI and people. Thus, ELLIS Alicante's scientific mission is to address three broad areas of basic research in Modern AI:



1. ARTIFICIAL INTELLIGENCE TO UNDERSTAND US,

researching new computational models of human behaviour using AI techniques at both the individual and aggregate level. It consists of creating individual models that improve people's lives by recognising and predicting their behaviour. The practical applications are diverse, from the development of algorithms that generate recommendations for users or accurate and fair credit models to promote financial inclusion. At the aggregate level, the goal is to model and predict human behaviour on a large scale, for a country or a region, which makes it possible to address challenges such as pandemics, detect possible economic crises or respond to natural disasters.

2. ARTIFICIAL INTELLIGENCE THAT INTERACTS WITH US,

with a special focus on research related to human-machine interaction in the context of new intelligent interactive mobile systems, personal assistants and chatbots.

3. ARTIFICIAL INTELLIGENCE THAT WE TRUST,

addressing the ethical challenges of today's AI, such as algorithmic discrimination, privacy violation, opacity, untruthfulness or subliminal manipulation of human behaviour. Current AI algorithms are not invulnerable and suffer from limitations that are important to identify and address in order to make their use inclusive and people-centred.



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6. RESEARCH PROJECTS

ANNUAL
REPORT
2022



ARTIFICIAL INTELLIGENCE TO UNDERSTAND US

Computational modelling of Human behaviour

Project 1 | AICOVID-19:

Data, Artificial Intelligence and COVID-19.



The first research project within the area of "Artificial Intelligence to Understand Ourselves: Computational modelling of Human behaviour" is the continuation of the project "DATA SCIENCE AGAINST COVID-19" which started in 2020.

This research work has been led by ELLIS Alicante, and has been carried out in collaboration with the rest of the researchers of the Data Science team in the fight against

COVID-19, belonging to various universities and research centres of the Valencian Community: the University of Alicante, the University Miguel Hernández, the University CEU Cardenal Herrera, the Polytechnic University of Valencia, the University Jaume I and the FOUNDATION FOR THE PROMOTION OF HEALTH AND BIOMEDICAL RESEARCH OF THE VALENCIAN COMMUNITY (FISABIO).

In 2022, work has centred around two sub-projects, one on Citizen Science and the other on Computational Epidemiology, as described below.

Citizen science

During 2022 we continued the research with the citizen survey launched by ELLIS Alicante in March 2020 under the leadership of Dr. Oliver.

Thanks to the implementation of weekly volunteer recruitment campaigns through Facebook, the development and weekly maintenance of a web page with visualisations of all the results and the dissemination of the results, this survey has collected more than 700,000 responses from Spain, Italy, Germany and Brazil mainly, being one of the largest citizen surveys in the world related to the coronavirus.

The survey, launched in March 2020, is anonymous and is structured in 26 questions that include demographic information about the participants (country, age, sex, zip code), their household situation (type of household, number of co-inhabitants in the household and their ages), their social behaviour (individual protection measures, perception of safety of different activities, estimated number of close contacts, whether they have had close contact with someone infected with coronavirus, etc... ..), their perception of the measures taken to mitigate the pandemic, their employment and economic situation, the emotional impact the pandemic is having on their lives and their health status.

In 2021 we adapted and extended the questions to the new pandemic situation, including questions to determine people's intention to be vaccinated, the most frequent socialisation context including the risk of contagion associated with this context and the level of social isolation of people according to the 6-question Lubben scale. Precisely the research work in 2022 has focused on the analysis of social isolation.

RESEARCH ON THE PREVALENCE OF SOCIAL ISOLATION

This work has involved quantitative and qualitative analyses of the prevalence of social isolation in the population based on 32,359 responses to the citizen survey collected over a 7-month period. We found (1) a significant increase in the prevalence of social isolation in the population, reaching almost 26%; (2) gender and age differences, with the highest prevalence of isolation among middle-aged people; (3) a strong relationship between economic impact and social isolation; and (4) differences in social isolation depending on the number of COVID-19 protective measures and the perceived risk of coronavirus infection by our participants. Our research sheds quantitative light on the sociological impact of the pandemic and allows us to identify key factors in the interaction between the deployment of non-pharmaceutical interventions to contain the spread of an infectious disease and the levels of social isolation of a population.

This research has been published in Nature Scientific Reports (h-index 242, Q1 according to SJR):

M. Martínez-García, E. Sansano-Sansano, A. Castillo-Hornero, R. Femenia, K. Roomp and N. Oliver. Social isolation during the COVID-19 pandemic in Spain: a population study. Sci Rep 12, 12543 (2022). Top 8% de artículos coetáneos del mundo según Altmetric.



Computational Epidemiology: COVID-19 Outbreak Analysis

During 2022, we also carried out another research work within the Data Science in the fight against COVID-19 project concerning the modelling of individual coronavirus outbreaks. In this work we analyse the main properties of all COVID-19 outbreaks tracked in the Valencian Community between September and December 2020. Our analysis includes the evaluation of the origin, dynamic evolution, duration and spatial distribution of the outbreaks.

We found that the duration of outbreaks follows a power-law distribution: most outbreaks are controlled within 2 weeks of onset, with only a few lasting longer than 2 months. We did not identify significant differences in outbreak properties with respect to geographic location across the region. Finally, we also determined the cluster size distribution of each infection origin through a Bayesian statistical model.

We hope that our work will help optimise and plan resource allocation for future pandemic tracking efforts.

This research has been published in *Frontiers in Public Health* (h-index 64, Q1 according to SJR):

D Hervás, M Rebollo, JA Conejero, N Oliver. COVID-19 outbreaks analysis in the Valencian Region of Spain in the prelude of the third wave. Frontiers in Public Health, 4503, (2022).

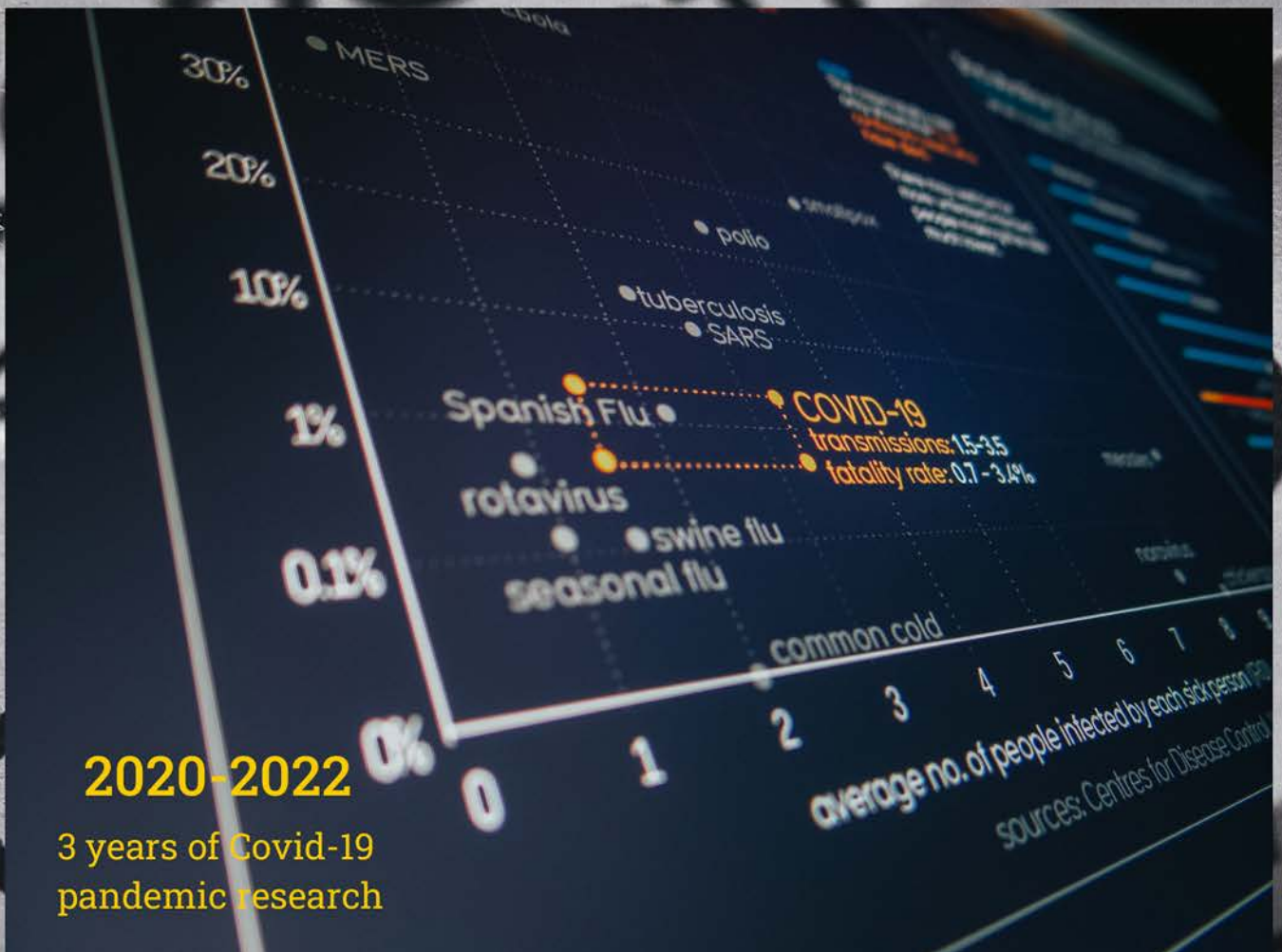
In 2022, we will also publish an additional scientific article in *Nature Scientific Reports* (h-index 242, Q1 according to SJR) based on research conducted in 20

De Nadai, M., Roomp, K., Lepri, B., & Oliver, N. (2022). The Impact of Control and Mitigation Strategies during the Second Wave of coronavirus Infections in Spain and Italy. Nature Scientific Reports , 12(1), 1-13.



Agreements signed

The Data Science in the Fight against COVID-19 research project has been co-funded in 2022 by a competitive research grant in collaboration with researchers from different universities and research centres of the Valencian Community: IA4COVID19 grant from the BANCO BILBAO VIZCAYA ARGENTARIA FOUNDATION (BBVA Foundation).





ARTIFICIAL INTELLIGENCE TO UNDERSTAND US

Computational modelling of Human behaviour

Project 2 | *BIASED:*

Cognitive Biases and Artificial Intelligence.



This line of research corresponds to the PhD thesis of ELLIS PhD student Aditya Gulati, a graduate with a Master's degree in Computer Science from IIT Bangalore in India with a strong interest in computational modelling of human behaviour. In addition to his work in India, he has collaborated with Prof Neumann at Ulm, Germany and Prof Gonzalez at CMU. His thesis supervisors are Dr. Oliver (primary) and Dr. Bruno Lepri (secondary) at FBK, who is an ELLIS Fellow in the ELLIS Human-Centric Machine Learning research program.

The focus of Aditya's thesis is the modelling of cognitive biases using Artificial Intelligence techniques, as well as the inclusion of such biases in AI systems that interact with people. The goal is to design AI systems that help us learn about and address our limitations, as well as design reliable intelligent interfaces.

During 2022 the focus of this project has been an investigation of cognitive biases and Artificial Intelligence. Human perception, memory and decision making are affected by dozens of cognitive biases and heuristics that influence our actions and decisions. Despite the pervasiveness of such biases, they are generally not exploited by current artificial intelligence (AI) systems that model human behaviour and interact with humans. In this theoretical research paper, we assert that the future of human-machine collaboration will involve the development of AI systems that model, understand, and possibly replicate human cognitive biases. We propose the need for a research agenda on the interaction between human cognitive biases and Artificial Intelligence. We classify existing cognitive biases from the perspective of AI systems using a novel taxonomy, identify three broad areas of interest, and outline research directions for the design of AI systems that have a better understanding of our own biases.

This research has produced a scientific publication:

Gulati, A., Lozano, M. A., Lepri, B., & Oliver, N. (2022). BIASeD: Bringing Irrationality into Automated System Design. Thinking Fast and Slow and Other Cognitive Theories in AI, AAAI Fall Symposium 2022. Baltimore, USA. (h-index 28 according SJR)



3

ARTIFICIAL INTELLIGENCE THAT WE TRUST

Challenges, Limitations, Ethical and Social Implications of Artificial Intelligence

Project 3 | Federated Learning (FL): Federated Learning and Algorithmic Justice



This line of research corresponds to the PhD thesis of Gergely Németh, a PhD student of the ELLIS PhD program. Gergely is a graduate with a Master's degree in Computer Science from Hungary, and professional experience in a Hungarian AI startup. He has extensive experience teaching and feels a keen interest in sharing his knowledge with students. He has also written about AI for Medium.

His primary thesis supervisor is Dr. Oliver and the secondary supervisor is Prof. Novi Quadrianto from the University of Sussex (UK) who is an ELLIS Scholar in the ELLIS Human-Centric Machine Learning research program. The local PhD tutor at the University of Alicante is Prof. Miguel Ángel Lozano.

Gergely's research work is on federated learning. Federated learning (FL) is an approach within machine learning that has recently emerged to solve privacy issues related to machine learning applications. Fairness or fairness in Artificial Intelligence is also a field that has gained awareness in recent years. At the intersection of the two fields, we can find new solutions to problems that exist in centralised machine learning, but new problems also emerge that are unique to federated learning training architectures.



During 2022, this work has focused on client selection methods in federated learning. A federated learning architecture consists of a central server and several clients that have access to potentially confidential private data. Clients can keep their data on their local machines and only share the parameters of their trained model locally with a central server that manages the collaborative learning process.

FL has delivered promising results in real-life scenarios such as healthcare, energy and finance. However, when the number of participating customers is large, the overhead of managing customers slows down learning. Therefore, customer selection has been introduced as a strategy to limit the number of communicating parties at each step of the process. Since the early naive random selection of customers, several customer selection methods have been proposed in the literature. Unfortunately, since this is an emerging field, a taxonomy of customer selection methods is lacking, making it difficult to compare approaches.

In this project, we propose a taxonomy of client selection in federated learning that allows us to shed light on current progress in the field and identify potential areas for future research in this promising area of machine learning.

The result of this research has been published in *Transactions on Machine Learning Research 2022*, a premier new scientific journal for the dissemination of global research in machine learning.

GD Németh, MÁ Lozano, N Quadrianto, N Oliver. A Snapshot of the Frontiers of Client Selection in Federated Learning. Transactions on Machine Learning Research (TMLR), 2022



3

ARTIFICIAL INTELLIGENCE THAT WE TRUST

Challenges, Limitations, Ethical and Social Implications of Artificial Intelligence

Project 4 | SocialAI:

Social implications of Artificial Intelligence on social platforms.



This line of research corresponds to the PhD thesis of Piera Riccio, a PhD student of the ELLIS PhD program. Piera has been affiliated with the Harvard Metalab and has completed a double master degree in ICT for Smart Societies (Politecnico di Torino, Italy) and in Data Science and Engineering (Telecom Paris - EURECOM, France). She is very interested in studying the limitations and challenges of Artificial Intelligence systems used for decision making with an artistic component.

Her primary thesis supervisor is Dr. Oliver and the secondary supervisor is Prof. Thomas Hofmann from ETH Zurich (Switzerland), who is an ELLIS Fellow in the ELLIS Human-Centric Machine Learning research program. The local PhD tutor at the University of Alicante is Prof. Francisco Escolano.

The topic proposed by Piera for her doctoral thesis deals with the social implications of Artificial Intelligence algorithms that are part of the social platforms used by billions of people. Social networking platforms are reshaping the flow of information in our society, establishing new paradigms of mass communication. Due to their ubiquitous nature, they constantly influence our daily choices, having a pervasive impact on different facets of our culture. On these platforms, Artificial Intelligence algorithms are massively used, for example, to choose and moderate what we watch, to provide automatic editing tools and to boost (or hinder) the popularity of publications and users.

In this paper, we want to analyse the implications of such platforms on our culture and our perceptions of certain social groups, including women.

For example, while these effects may be hidden and difficult to decipher, it is critical to investigate the extent to which AI is contributing to the amplification of existing gender disparities. Furthermore, we wish to rethink the applications of AI in interacting with these platforms, limiting unethical behaviours with unhealthy and unfair outcomes for individuals and society as a whole.



In 2022, this project has focused on two investigations:

Algorithmic art censorship

First, an investigation on algorithmic censorship of art. In the last decade, the application of Artificial Intelligence (AI) techniques to generate creative content autonomously or to support human creativity has gained interest in the scientific community. The generative models that have been proposed in the literature are changing the agency and dynamics of our artistic practices. A less explored area at the intersection of AI and creativity includes the indirect impact of AI on our creativity through content moderation algorithms in social networks.

Such algorithms tend to censor artistic pieces that show nudity, acting as inhibitors of human creativity. In this paper, we present a research agenda to address this challenge from a cultural and gender perspective, and propose that a human-centred and humanities approach is necessary to develop AI systems that positively impact artistic practices.

Beautifying filters

Second, an investigation into social media beautification filters. Augmented reality filters applied to selfies have become very popular on social media platforms for a variety of applications, including marketing, entertainment, and aesthetics. Given the widespread adoption of these facial filters and the importance of faces in our social structures and relationships, the scientific community is increasingly interested in analysing the impact of such filters from a psychological, artistic, and sociological perspective. However, there are few quantitative analyses in this area, mainly due to the lack of publicly available datasets of facial images with AR filters applied. The proprietary and close nature of most social networking platforms does not allow users, scientists, and practitioners to access the code and details of available AR facial filters. Extracting faces from these platforms to collect data is ethically unacceptable and therefore should be avoided in research. In this work, we have developed OpenFilter, a flexible framework for applying augmented reality filters available on social networking platforms on large existing collections of human faces. In addition, we have generated and shared FairBeauty and B-LFW, two beautified versions of the publicly available FairFace and LFW databases. Finally, we evaluated the impact of beautification filters using state-of-the-art computer vision techniques and found that (1) the filters homogenise faces and reduce diversity; (2) they do not significantly impact automatic face recognition systems; (3) they have a white racial bias such that beautified faces appear whiter than unbeautified faces, regardless of race.

This project has generated the following scientific publications:

Riccio, P., Oliver, J. L., Escolano, F., & Oliver, N. (2022). Algorithmic Censorship of Art: A Proposed Research Agenda. 13th International Conference on Computational Creativity, 2022. Bolzano. Italy.

Riccio, P., Psomas, B., Galati, F., Escolano, F., Hofmann, T., & Oliver, N. (2022). OpenFilter: A Framework to Democratize Research Access to Social Media AR Filters. Thirty-sixth Conference on Neural Information Processing Systems Datasets and Benchmarks Track. NeurIPS 2022. New Orleans. USA (h-index 266, Q1 according SJR)

Riccio, P., & Oliver, N. (2022). Racial Bias in the Beautyverse. European Conference on Computer Vision 2022. Workshop on Computer Vision for the Metaverse.

In addition, the two databases of beautified faces can be found here:

<https://fairbeauty.z6.web.core.windows.net/>



3

ARTIFICIAL INTELLIGENCE THAT WE TRUST

Challenges, Limitations, Ethical and Social Implications of Artificial Intelligence

Project 5 | Fairness:

Fair and transparent machine learning models



This line of research corresponds to the doctoral thesis of Adrián Arnaiz, PhD student of the ELLIS PhD program. Adrián has a Master's degree in Data Science from the UOC and has done research at the University of Burgos in collaboration with Prof. Kanber from University College London (UK). He has worked on new autoencoder architectures for brain MRI reconstruction.

He is very interested in the human aspects of machine learning. His primary thesis supervisor is Dr. Oliver and the secondary supervisor is Prof. Manuel Gomez from the Max Planck Institute in Saarbrücken (Germany), who is an ELLIS Fellow in the ELLIS Human-Centric Machine Learning research program. The local PhD tutor at the University of Alicante is Prof. Francisco Escolano.

The focus of Adrian's thesis is algorithmic justice and transparency. Machine learning models are becoming major tools for addressing complex social problems and are also increasingly implemented to make or support decisions about people in many important areas of their lives, from justice to health care. Therefore, the ethical implications of such decisions must be taken into account, including concepts such as privacy, transparency, accountability, trustworthiness, autonomy, and fairness. In addition, many of these concepts do not have universally accepted definitions.



For example, different definitions of fairness may not be satisfied at the same time. In this thesis, the goal is to address these challenges by leveraging graph theory and causal models to develop individual and group machine learning algorithms and metrics that improve fairness, accountability, and transparency in algorithmic decision making.

During 2022, the focus of the research has been on the analysis and automatic rewiring of graphs using Artificial Intelligence techniques, as a preliminary step to be able to develop novel models of algorithmic justice in graphs. Graph Neural Networks (GNNs) have been shown to achieve competitive results in tackling graph-related tasks, such as node and graph classification, link prediction, and node and graph clustering in a variety of domains. Most GNNs use a message-sending methodology and are therefore referred to as MPNNs. Despite their promising results, MPNNs have been reported to suffer from over-smoothing, over-squashing and under-reaching. Rewiring and graph clustering have been proposed in the literature as solutions to address these limitations.

However, most state-of-the-art graph rewiring methods do not preserve the global topology of the graph, are non-differentiable (inductive) and require hyperparameter tuning.

In this research, we propose DiffWire, a novel framework for graph rewiring in MPNNs that is fully differentiable and parameter-free by exploiting the Lovász limit. Our approach provides a unified theory for graph rewiring by proposing two new complementary layers in MPNNs: first, CTLayer, a layer that learns the travel times and uses them as a relevance function for edge weighting; second, GAPLayer, a layer for optimising the spectral gap, depending on the nature of the network and the task at hand. We empirically validate the value of our proposed approach and each of these layers separately with benchmark datasets for graph classification. DiffWire brings together the ability to learn travel times to work with related definitions of curvature, which opens the door to the development of more expressive MPNNs.

This project has generated the following scientific publication:

RArnaiz-Rodríguez, A., Begga, A., Escolano, F., & Oliver, N. (2022). DiffWire: Inductive Graph Rewiring via the Lovász Bound. Learning on Graphs Conference (LoG) 2022.



Also, as a result of this research, a tutorial has been prepared and delivered at the Learning on Graphs 2022 international conference. All the information about this tutorial, including slides, code and video, can be found here:

<https://ellisalicante.org/tutorials/GraphRewiring>

3

ARTIFICIAL INTELLIGENCE THAT WE TRUST

Challenges, Limitations, Ethical and Social Implications of Artificial Intelligence

*Project 6 | Algorithmic Explainability and Transparency (XAI):
Transparency, uncertainty and algorithmic explainability.*

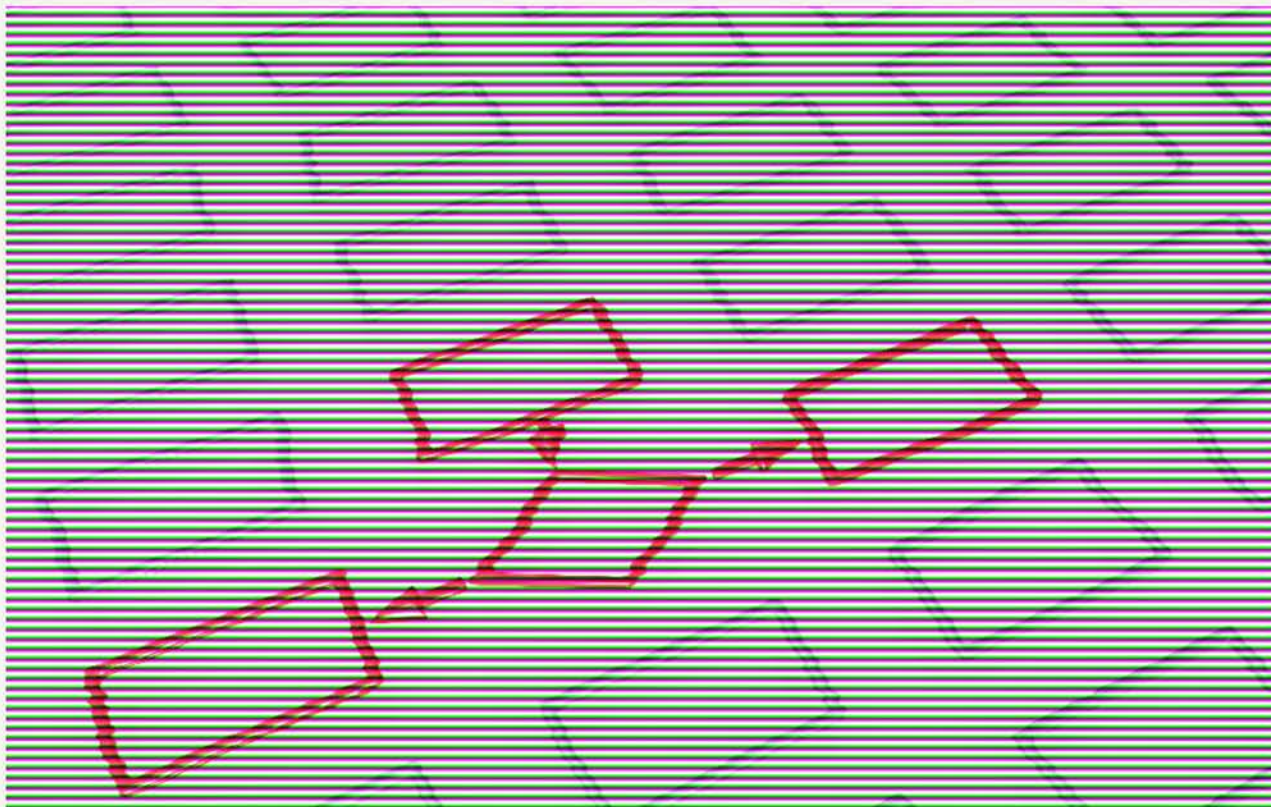


This line of research corresponds to Julien Colin's doctoral thesis. Julien Colin, holds a BSc in Physics and Chemistry (2019, University of Lorraine) and a MSc in Cognitive Sciences: Natural and Artificial Cognition (2021, INP Grenoble). Before the start of his PhD, he worked as a research assistant; first at ANITI for 6 months (2021, Toulouse) then at Brown University for 5 months (2022, Providence).

His PhD topic focuses on explainable AI and neuroscience. In his research, he is interested in developing methods to better understand intelligent systems. His thesis directors are Nuria Oliver (ELLIS Alicante) and Thomas Serre (ANITI and Brown University). The goal of explainable AI is to develop methods that explain how models behave to humans, the most widely used being attribution methods. Recent work on human evaluation of attribution methods has highlighted that (1) they are good enough to tell us 'where' the model is looking and that the community now needs to shift its focus to developing complementary explainability methods that tell us 'what the model is looking at, and (2) we need better benchmarks for rating explainability methods, as the one currently leading the field is too disconnected from humans. In this Ph.D., he proposes to address (1) by using generative models to develop new methods of explainability that complement the limitations of current attribution methods, and (2) drawing on neuroscience to develop benchmarks that give us a better understanding of

the utility of explainability methods, and (2) drawing on neuroscience to develop benchmarks that give us a better understanding of the usefulness of explainability methods.

Julien joined ELLIS Alicante in November 2022. During the weeks of 2022 that he has worked at ELLIS Alicante, Julien's focus has been on evaluating the impact of beautification filters on automatic race classification systems from facial images. This work will continue in 2023 and a scientific publication is anticipated to be produced in 2023, in collaboration with Piera Riccio.



Agreements signed

Research projects P2 to P6 have been co-financed under a collaboration agreement with the Banco Sabadell Foundation described in section 5 of this document.





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7.

OUTREACH ACTIVITIES AND RESULTS

ANNUAL
REPORT
2022

The dissemination of the activity of ELLIS Alicante and its research results is a fundamental pillar of the research activity to ensure that such research achieves social impact and thus fulfil its mission and vision.

SCIENTIFIC PUBLICATIONS

De Nadai, M., Roomp, K., Lepri, B., & Oliver, N. (2022). The Impact of Control and Mitigation Strategies during the Second Wave of coronavirus Infections in Spain and Italy. *Nature Scientific Reports* , 12(1), 1-13. January 2022.

Alt, F., Kostakos, V., & Oliver, N. (2022). Out-of-the-Lab Pervasive Computing. *IEEE Pervasive Computing Journal* , 21(1), 7-8.

Riccio, P., Galati, F., Zuluaga, M. A., De Martin, J. C., & Nichele, S. (2022). Translating Emotions from EEG to Visual Arts. *International Conference on Computational Intelligence in Music, Sound, Art and Design (Part of EvoStar)* 243-258. June-July 2022.

Cauchard, J., Jarke, M., & Oliver, N. (2022). Communications of the ACM Europe Special Section. *Communications of the ACM* , 65(4), 32-34.

Riccio, P., Oliver, J. L., Escolano, F., & Oliver, N. (2022). Algorithmic Censorship of Art: A Proposed Research Agenda. *13th International Conference on Computational Creativity. ICCC'22*. Bolzano. Italy. June-July 2022.

Oliver, N. (2022). SRIP Report 2022. *SRIP Report of the European Commission* 664-707.

Conejero, A. J., & Oliver, N. (2022). La iniciativa Valencia IA4COVID. *Indice: Revista de Estadística y Sociedad* , 1(86), 33-35. July 2022.

Lozano, M.A., Garibo, O., Piñol, E., Rebollo, M., Polotskaya, K., Garcia-March, M. A., Conejero, J. A., Escolano, F., & Oliver, N. (2022). Open Data Science to fight COVID-19: Winning the 500k XPRIZE Pandemic Response Challenge. International Joint Conference on Artificial Intelligence Organisation (IJCAI) 5304-5308. Vienna. Austria. July 2022.

Best paper award track from sister conferences

Martínez-García, M., Sansano-Sansano, E., Castillo-Hornero, A., Femenia, R., Roomp, K., & Oliver, N. (2022). Social Isolation during the COVID-19 Pandemic in Spain: A Population Study. Nature Scientific Reports , 12(1), 1-15. July 2022.

Top 8% of scientific publications according to Altmetric

Gulati, A., Lozano, M. A., Lepri, B., & Oliver, N. (2022). BIASeD: Bringing Irrationality into Automated System Design. Thinking Fast and Slow and Other Cognitive Theories in AI, AAAI Fall Symposium 2022. Arlington. Virginia. USA. November 2022.

Fuente, D., Hervás, D., Rebollo, M., Conejero, J.A., & Oliver, N. (2022). COVID-19 outbreaks analysis in the Valencian Region of Spain in the prelude of the third wave. Frontiers of Public Health, 10.2022. November 2022

Colin, J., Fel, T., Cadène, R., & Serre, T. (2022). What I Cannot Predict, I Do Not Understand: A Human-centred Evaluation Framework for Explainability Methods. 36th Conference on Neural Information Processing Systems (NeurIPS). November 2022

Arnaiz-Rodríguez, A., Begga, A., Escolano, F., & Oliver, N. (2022). DiffWire: Inductive Graph Rewiring via the Lovász Bound. Proceedings of the First Learning on Graphs Conference, PMLR , 198, 15:1-15:27. Online. December 2022.

Németh, G. D., Lozano, M. A., Quadrianto, N., & Oliver, N. (2022). A Snapshot of the Frontiers of Client Selection in Federated Learning. Transactions on Machine Learning Research. TMLR 2022. December 2022.

Riccio, P., Psomas, B., Galati, F., Escolano, F., Hofmann, T., & Oliver, N. (2022). OpenFilter: A Framework to Democratize Research Access to Social Media AR Filters. 36th Conference on Neural Information Processing Systems (NeurIPS) Datasets and Benchmarks Track. NeurIPS 2022. New Orleans. USA. December 2022

Riccio, P., & Oliver, N. (2023). Racial Bias in the Beautyverse: Evaluation of Augmented-Reality Beauty Filters. European Conference on Computer Vision 2022. December 2022

Talks and seminars

DISTINGUISHED SPEAKER SERIES

NIR AILON

On April 7, 2022 a Distinguished Lecture of the ELLIS Alicante Foundation was given by Professor Nir Ailon. This scientific dissemination activity consists of inviting internationally distinguished researchers to visit the Foundation and give a scientific-academic lecture from which the entire scientific and educational community around the University of Alicante can benefit.

Professor Ailon is a Professor of Computer Science at the Technion in Haifa Israel. He completed his PhD in 2006 at Princeton University and then continued as a postdoc at the Institute for Advanced Study at Princeton. He has served as a lecturer at Technion since 2011 and also spent time at Google Research, Yahoo! Research, as well as other industrial research labs. He received an ERC consolidator grant. His research spans algorithm theory, mathematical foundations of big data and machine learning. He is currently involved in AI acceleration research at deci.ai.



Attendees at the ELLIS 2022 Doctoral Symposium organized by ELLIS Alicante.

His talk was entitled Fast Approximate Matrix Multiplication - Theory and Practice in AI Hardware. In this keynote Professor Ailon covered the topic of matrix multiplication. Large and dense matrix multiplication is a key ingredient of deep networks, and state-of-the-art architectures can spend more than 99% of time and energy consumption on matrix multiplication. Although fast $O(n^3)$ time matrix multiplication algorithms are known in the theoretical literature, they are not practical and are not used in the AI hardware and software ecosystem today. In his talk, he presented algorithms and heuristics for faster approximate matrix multiplication, and showed the potential impact, as well as limitations, of such approaches in the future of deep learning. The results he presented covered both academic research and his most recent experience with the cutting-edge AI industry at `deci.ai`, where he discovered a large gap between academic research and practical AI.

MONA SCHIRMER

On May 25, Mona Schirmer gave a lecture on modelling irregular time series with continuous recurrent units. Mona Schirmer is an ELLIS PhD student at the University of Amsterdam and a machine learning consultant at the World Bank. Prior to that, she completed a master's degree in statistics at Humboldt University and the Technical University of Berlin, as well as a French engineering diploma at ENSAE. As an undergraduate, she studied economics and political science at the Humboldt University of Berlin and the University of Munich. Her research interests lie in probabilistic machine learning and machine learning for social good.

Her presentation was on recurrent neural networks (RNNs). Recurrent neural networks (RNNs) are a popular choice for modelling sequential data. Modern RNN architectures assume constant time intervals between observations. However, in many datasets (e.g., medical records), observation times are irregular and may contain important information. To address this challenge, Mona presented continuous recurrent units (CRU) - a neural architecture that can naturally handle irregular intervals between observations. The CRU assumes a hidden state, which evolves according to a linear stochastic differential equation and is integrated into an encoder-decoder framework. The recursive CRU computations can be derived using the continuous-discrete Kalman filter and are in closed form. The resulting recursive architecture has temporal continuity between hidden states and an activation mechanism that can optimally integrate noisy observations. Described an efficient parameterisation scheme for the CRU that leads to a fast implementation of f-CRU.

She shared an empirical study of CRU on a series of challenging data sets, demonstrating its ability to interpolate irregular time series better than methods based on neural ordinary differential equations.

The talk is available here: <https://vertice.cpd.ua.es/269014>

HUMAN-CENTRIC MACHINE LEARNING READING GROUP

ELLIS Alicante, through its PhD students, organises the Human-centric Machine Learning Reading Group, an international reading group led by them and to which dozens of researchers from all over the world belong (<https://ellisalicante.org/readingGroup>). During 2022, this group has held 10 sessions dedicated to the following topics:

- Towards a Theory of Justice for Artificial Intelligence, Jan 2022
- Co Author: Designing a Human-AI Collaborative Writing Dataset for Exploring Language Model Capabilities, Feb 2022
- Guest talk by Qualcomm AI Research: Natural Graph Networks, Feb 2022
- Improving human decision-making with machine learning, Mar 2022
- An Introduction to Reliable and Robust AI, Mar 2022
- Lessons for artificial intelligence from the study of natural stupidity, Mar 2022
- Human Perceptions of Fairness in Algorithmic Decision Making: A Case Study of Criminal Risk Prediction, May 2022
- An Introduction to AI Safety, May 2022
- Performative Power, Jun 2022
- Psychoanalysing artificial intelligence: the case of Replika, Jun 2022
- Understanding and Creating Art with AI: Review and Outlook, Jul 2022
- BIASeD: Bringing Irrationality into Automated System Design, Nov 2022
- What I Cannot Predict, I Do Not Understand: A Human-centred Evaluation Framework for Explainability Methods, Dec 2022



Congress organization

ELLIS DOCTORAL SYMPOSIUM 2022

ELLIS Alicante was the organiser of the II ELLIS Doctoral Symposium (EDS22), which took place between September 19 and 23. The symposium brought together at the campus of the University of Alicante more than 160 PhD students and leading researchers in the ethical study of Artificial Intelligence based on Machine Learning.

The Symposium was a meeting place for young researchers and distinguished scientists to share and advance knowledge in AI applied to diverse fields for the Social Good, such as health and climate, for the benefit and progress of all sectors of society.

EDS22 featured top-level guest speakers, including Lama Nachman, who led the INTEL team that developed the intelligent interface that enabled physicist Stephen Hawking to communicate through technology, Virginia Dignum (Wallenberg Program on Humanities and Society for AI, Autonomous Systems and Software (WASP-HS) & Umeå University), Emilia Gomez (Joint Research Centre, European Commission & Universitat Pompeu Fabra), Krishna Gummadi (Max Planck Institute for Software Systems), Emmanuel Letouzé (Data-Pop Alliance & Universitat Pompeu Fabra), Christopher Markou (University of Cambridge), John Shawe-Taylor (University College London), Irina Shklovski (University of Copenhagen), Mihaela van der Schaar (University of Cambridge).

The Symposium program included a successful business job fair with the participation of some twenty technology companies, including technology giants such as INTEL and Bosh.

The focus of EDS22 was Artificial Intelligence for Social Good, which is the focus of ELLIS Alicante. Public and private, for-profit and non-profit entities collaborated in the organisation of the Symposium, including ELLIS Europe, the Ministry of Foreign Affairs, European Union and Cooperation, the Generalitat Valenciana (Department of Innovation, Universities, Science and Digital Society), Casa Mediterráneo, the Alicante City Council, the Banco Sabadell Foundation, the Esperanza Pertusa Foundation, the European ELISE program, the University of Alicante and the Science Park of the University of Alicante, Bosch, Qualcomm, INTEL and Angela Impact Economy.



More information about the Symposium can be found here:
<https://ellisalicante.org/eds2022-es>

Presentations

in conferences, webinars and forums

The activities, research results, mission and vision of ELLIS Alicante have been widely disseminated through presentations in different forums, as well as collaborations with the media.

These activities have been developed by Dr. Nuria Oliver as a researcher at ELLIS Alicante, who has intervened in dozens of conferences and webinars related to the research activity of ELLIS Alicante described above, as well as with the ELLIS Alicante Foundation and ELLIS Europe, including:



Adrian Arnaiz	Lecture on "Algorithmic Fairness" at the University of Alicante, Spain.	Jan 17
Dr. Oliver	Invited lecture at the Congress of the Future on "Socially Sustainable Artificial Intelligence", Chile and online "Socially sustainable Artificial Intelligence", Chile and online	Jan 19
Gergely D. Németh	Lecture on "Fairness in Federated Learning: Challenges and Opportunities" at the University of Alicante, Spain.	Jan 31



ELLIS Alicante	Participates in a forum on the Promotion of Artificial Intelligence Research organised by Alicante Plaza, Spain.	Feb 3
Dr. Oliver	Participates in the event on "Women in Science" at UPV Gandía, Spain	Feb 8
Piera Riccio	Lecture on "AI on Social Media: Cultural Impact and Proposed Solutions" at the University of Alicante, Spain.	Feb 14
Dr. Oliver	Invited lecture on "Data Science against COVID-19" at PathCheck Foundation /MIT Media Lab, online	Feb 18

Dr. Oliver	Invited lecture on "Towards Socially Sustainable AI" at the Future Talks series of the Bankinter Foundation, online	Feb 24
Aditya Gulati	Lecture on "AI and Human Biases" at the University of Alicante, Spain.	Feb 28



Dr. Oliver	Participates as a panelist at the Horasis USA congress, in the session "AI for climate change", online	Mar 4
Dr. Oliver	Participates as a panelist in the event on "Women, Science and Business" organised by EDEM and the Rey Jaime I prize foundation, Valencia, Spain.	Mar 7
Dr. Oliver	Participates as a panellist in the event "Algorithms and Biases" at RTVE, Madrid, Spain.	Mar 8
Dr. Oliver	Participates as a panellist in the dialogue "Sociedad Pantalla" organized by the Social Observatory of the Obra Social La Caixa Foundation, Barcelona, Spain.	Mar 16
Dr. Oliver	Participates as a panellist in a session on "Algorithmic Discrimination" organized by the Ministry of Equality, Madrid, Spain and online.	Mar 22



Dr. Oliver	Invited presentation at CHIL 2022 on "Data Science vs. COVID-19", online	Apr 7
Piera Riccio	Exhibits an art installation on Brain AI-Art at the World AI Cannes, France	Apr 14
Piera Riccio	Exhibits an art installation on Brain AI-Art at the Gallerie Catherine d'Issert, in Saint-Paul-de-Vence, France.	Apr 22





Dr. Oliver	Invited lecture on "Artificial Intelligence networks" at the NAIXUS network launching event, Slovenia	May 4
Dr. Oliver	Invited lecture on "Artificial Intelligence and Ethics" at the National Congress of Ethics Committees, Elche, Spain.	May 5
Dr. Oliver	Invited lecture on "A career on Artificial Intelligence" at the Jorge Juan Institute, Alicante, Spain.	May 6
Dr. Oliver	Invited lecture on "Artificial Intelligence" at the Digital Fusion Conference, Valencia, Spain	May 12
Dr. Oliver	Invited lecture on "Artificial Intelligence and Health" at the national congress of pediatrics's neurology, Benidorm, Spain.	May 26



Dr. Oliver	Invited lecture on "Towards Socially Sustainable Artificial Intelligence" in the Malawi Data Summit, Lilongwe, Malawi y online	Jun 3
Dr. Oliver	Invited lecture on "Data Science vs. COVID-19" at BIFI International Conference, Zaragoza, Spain	Jun 7
Dr. Oliver	Invited lecture on "Data Science against COVID-19" in the congress Foundations of Responsible Computing (FORC), Harvard, Massachusetts, USA.	Jun 8
Predocctoral students team	Presentation of their work at the Jornada de Doctorado en Informática - 2022 of the University of Alicante, Spain.	Jun 9
Dr. Oliver	Invited lecture on "Artificial Intelligence" at the conference on the Automation of Processes in Public Administration, Madrid, Spain.	Jun 14

Dr. Oliver	Invited lecture on "Data Science against COVID-19" at ODSC Europe conference, hybrid event	Jun 16
Dr. Oliver	Invited lecture on "Towards socially acceptable Artificial Intelligence" at the annual meeting of the State Attorneys of the Ministry of Justice, Madrid, Spain.	Jun 22
Dr. Oliver	Invited lecture on "Data Science against COVID-19" at the Summer School of the University of Castilla La Mancha, Albacete, Spain.	Jun 29



Dr. Oliver	Invited lecture on "Artificial Intelligence and Creativity" at the Workshop on Artificial Intelligence organised by CEDRO, online	Jul 1
Piera Riccio	Lecture on "Algorithmic Censorship of Art: A Proposed Research Agenda" en 13th International Conference on Computational Creativity, Bolzano, Italia	Jul 1
Dr. Oliver	Participates in the Bellesguard Dialogues organized by the Abat Oliba University on "The role of Artificial Intelligence in today's order", webinar	Jul 5
Dr. Oliver	Speaker at the launch of the European Commission's SRIP 2022 report, webinar	Jul 12
Dr. Oliver	Invited lecture on "Workshop on Human-machine Collaboration and Teaming" en ICML 2022, Baltimore, Maryland, USA	Jul 23



Piera Riccio	Exhibits an art installation and a performative documentary on algorithmic equity at the Phest Festival in Monopoli, Bari, Italy. The exhibition concludes on November 1.	Sep 9
Piera Riccio	Speaks at the opening of the HAY Festival in Segovia, Spain	Sep 15



ELLIS Alicante	Co-organises the I European Forum on Artificial Intelligence for Health, Well-being and Inclusion, Alicante, Spain	Sep 16
ELLIS Alicante	Organises the II ELLIS Doctoral Symposium, Alicante, Spain	Sep 19-23
Dr. Oliver	Invited lecture at Algovorit's event on "Towards a Socially Sustainable AI", Madrid, Spain.	Sep 28
Dr. Oliver	Invited lecture at the NiCcolla project congress on "Towards European Sovereignty in AI", Alcoy, Spain	Sep 29
Dr. Oliver	Invited panellist on Artificial Intelligence and Ethics organised by GovLab.org, online	Sep 30



Dr. Oliver	Inaugural lecture at the opening ceremony of the 2022-2023 academic year of the Murcian public universities, Cartagena, Spain.	Oct 3
Dr. Oliver	Delivered a speech at the investiture ceremony of Dr. Ana Conesa at the Real Academia de Ingeniería de España, Madrid, Spain.	Oct 6
Dr. Oliver	Guest panellist at the Global IESE Alumni Reunion on "Artificial Intelligence: Using Your Power for Good", Munich, Germany	Oct 7
Dr. Oliver	Invited lecture at the Economic Forum EL ESPAÑOL, Alicante, Spain.	Oct 11
Dr. Oliver	Invited lecture at 2022 ACM Multimedia Conference on "Data Science against COVID-19", Lisbon, Portugal	Oct 14

Piera Riccio	Participates in ELLIS video shoot in Tübingen, Germany	Oct 13-14
Dr. Oliver	Invited lecture at the EUH4D, DSSC, BDVA i-Spaces event on "Towards a Sustainable Artificial Intelligence", Valencia (online), Spain	Oct 17
Dr. Oliver	Invited lecture at 2022 MIMODE conference on "Data Science against COVID-19", Palma de Mallorca, Spain	Oct 19
Dr. Oliver	Invited lecture at the Fundación Juan March on "Towards a Sustainable Artificial Intelligence", Madrid, Spain.	Oct 20
Piera Riccio	"Racial Bias in the Beautyverse: evaluation on social media augmented reality filters" at the European Conference on Computer Vision 2022, Tel Aviv, Israel.	Oct 20
Dr. Oliver	Invited lecture at the congress organized by the Public Employment Service on "Artificial Intelligence", Extremadura (online), Spain.	Oct 21
Adrián Arnaiz	Invited lecture at the PERTE de la Nueva Economía de la Lengua organised by the Ministry of Economic Affairs and Digital Transformation, Madrid, Spain.	Oct 25
Dr. Oliver	Invited lecture at the Nobel Symposia on Predictability in Science in the Age of AI, Stellenbosch, South Africa	Oct 26
Piera Riccio	Lecture at the Banco Sabadell Foundation about "Art and Beauty Filters Project", online	Oct 28





Piera Riccio	Invited lecture at the Max Planck Institute for Software Systems (MPI-SWS) on "The Beautyverse: beauty filters on social media".	Nov 4
Dr. Oliver	Invited lecture at the V Artificial Intelligence Conference on "ELLIS, The European Laboratory for Learning and Intelligent Systems", Alicante, Spain.	Nov 7
Dr. Oliver	Keynote speech at the V Congress on Connected Industry on "Towards Socially Sustainable AI: The European Perspective", Valencia, Spain.	Nov 8
Dr. Oliver	Invited paper at Bosch Connected World Conference on "Data Science against COVID-19", Berlin (online), Germany	Nov 10
Aditya Gulati	Invited lecture at the Max Planck Institute for Software Systems (MPI-SWS) on "Bringing Irrationality into Automated System Design", online	Nov 15
Dr. Oliver	Invited panellist at Smartcity Expo on "When Technology becomes a Push for Inclusion", Barcelona, Spain.	Nov 17
Dr. Oliver	Invited lecture at PuzzleX on "The Metaverse", Barcelona, Spain	Nov 17
Aditya Gulati	Lecture "BIASeD: Bringing Irrationality into Automated System Design" at the AAAI 2022 Fall Symposium on Thinking Fast and Slow and Other Cognitive Theories in AI, Arlington, Virginia, USA.	Nov 18
Dr. Oliver	Invited lecture at the conference on "Age, gender and academia" organized by the Universidad Autónoma de Madrid, Madrid (online), Spain.	Nov 24

Piera Riccio	Lecture "OpenFilter: A Framework to Democratise Research Access to Social Media AR Filters" at the Thirty-sixth Conference on Neural Information Processing Systems, New Orleans, Louisiana, USA.	Nov 28
Dr. Oliver	Invited panellist at EVAP's "20 Years Leading the Future" conference, Valencia, Spain.	Nov 29
Dr. Oliver	Invited lecture on "Artificial Intelligence" at the BIDA conference on Artificial Intelligence, Navarra (online), Spain.	Nov 30
Dr. Oliver	Invited panelist at the presentation of the study on Artificial Intelligence and Ethics of Fundación SERES, Madrid (online), Spain.	Nov 30



Dr. Oliver	Invited lecture on "Socially sustainable Artificial Intelligence" at the Conference on Digitisation and Artificial Intelligence in the Water Cycle, Universitat Jaume I, Castellón de la Plana (online), Spain	Dec 1
Dr. Oliver	Invited lecture on "ELLIS: The European Laboratory for Learning and Intelligent Systems" at the Alicante Technology Forum, Alicante, Spain.	Dec 2
Adrián Arnáiz	Presented his paper "DiffWire: Inductive Graph Rewiring via the Lovász Bound" at the First Learning on Graphs 2022 conference (online).	Dec 9
Adrián Arnáiz	Presented his tutorial on "Graph Rewiring: from Theory to Applications in Fairness" at the First Learning on Graphs 2022 conference (online).	Dec 11
Dr. Oliver	Invited lecture on "The (lack) of diversity in Artificial Intelligence" at the International Congress on Economics and Public Budgeting for Equal Opportunities between Men and Women, Caixaforum Auditorium, Seville, Spain.	Dec 14

Piera Riccio	Invited paper on Homogenization and Racial Bias in the Metaverse at the IEEE II International Congress on Intelligent Reality (ICIR 2022), (online)	Dec 16
Adrián Arnáiz	Invited lecture on "Algorithmic Fairness and Artificial Intelligence" at SpainAI, Burgos, Spain	Dec 22

Other scientific dissemination activities

Media impact

ELLIS Alicante's work has appeared in dozens of articles in the written press (digital and printed), radio and television, local, regional, national and international.

TRIBUNA
Comienza el curso: tú a Tecnología, yo a Humanidades

EL ESPAÑOL
DE ALICANTE
Nuria Oliver, directora y fundadora de Ellis Alicante.
EDUCACIÓN / INNOVACIÓN
Nuria Oliver (Ellis Alicante): "Se está produciendo un éxodo de las mejores mentes de Inteligencia Artificial"

Living > Trabajo y finanzas
Nuria Oliver: "Los algoritmos definen la belleza"
La directora de la Fundación Ellis, miembro de la Real Academia de Ingeniería y referente en inteligencia artificial en el mundo ha discriminación de género de los algoritmos.
POR PAKA DÍAZ PUBLICADO: 01/12/2022

El Consell financia con 1,5 millones la investigación en IA de la Fundación Ellis Alicante
La firma de este convenio se enmarca en la Estrategia de Inteligencia Artificial de la Comunidad Valenciana

Nuria Oliver: "No me puedo imaginar un futuro más próspero para la salud que el que nos ofrece la inteligencia artificial"
La investigadora ha participado en la primera sesión del Fórum E+i celebrado en Alicante donde se ha abordado cómo estos programas impulsan el avance de la salud y el bienestar de las personas

rtve playradio no es un día cualquiera
NO ES UN DÍA CUALQUIERA
Fundación ELLIS Alicante - Nuria Oliver
29/09/2022 29:37
Nuria Oliver, nuestra invitada especial esta mañana, es directora Científica y cofundadora de la Fundación ELLIS Alicante. Con ella hablamos de Inteligencia Artificial. Europa está en posición de inferioridad respecto a Estados Unidos y China en esta materia.

A GOLPE DE BIT
Mujeres referentes. ¿Nos lo ponen más fácil?

"Necesitamos una Inteligencia Artificial que respete los derechos humanos, diversa, inclusiva y sostenible"
Entrevistamos a Nuria Oliver, Fundadora de la Fundación Unidad ELLIS Alicante, para abordar la necesidad de una Inteligencia Artificial que nos ayude a abordar los grandes retos del siglo XXI.
16-12-2022 | Daniel Jiménez

INFORMACIÓN
SECCIONES LALACANTI SUCESOS HÉRCULES CF HOGUERAS UNIVERSIDAD BARRIOS EL TIEMPO FARMACIAS AGENDA
Give digital transformation a wake-up call. See how dynatrace
Nuria Oliver: "No me puedo imaginar un futuro más próspero para la salud que el que nos ofrece la inteligencia artificial"

EL PAÍS
TRIBUNA > 1
Menos meta y más con: cinco motivos para cuestionar el metaverso

Actualidad, AI, Inteligencia Artificial
La Fundación Unidad ELLIS Alicante, dedicada a la IA, premio Innovación Social de la AEF
Redacción BDM 23/11/2022



03/02/2022	ALICANTE PLAZA	#ForoAP La inteligencia artificial busca mecenazgo; la empresa, soluciones digitales - Alicanteplaza
14/02/2022	LAS PROVINCIAS	Una jornada para dar visibilidad a la mujer en el mundo de la ciencia Las Provincias
27/02/2022	LAS PROVINCIAS	«La mayoría de las aplicaciones de los móviles están diseñadas para ser adictivas» Las Provincias
10/03/2022	EL ESPAÑOL	ELLE' celebra el Día Internacional de la Mujer reconociendo y premiando el talento femenino (elespanol.com)
18/03/2022	EL ESPAÑOL ALICANTE	Nuria Oliver (Ellis Alicante): "Se está produciendo un éxodo de las mejores mentes de Inteligencia Artificial" (elespanol.com)
22/03/2022	FUNDACIÓN BANCO SABADELL	Inteligencia Artificial por y para las personas. Fundación ELLIS Alicante. – Fundació Banc Sabadell (fundacionbancosabadell.com)
30/03/2022	ALICANTE PLAZA	Emprender con nombre de mujer' del PCA: el caso de Adela Yáñez, directora de I+D+I de Labaqua - Alicanteplaza
07/04/2022	ALICANTE PLAZA	Emprender con nombre de mujer' del PCA: Piera Riccio, investigadora en Fundación Ellis - Alicanteplaza
03/05/2022	ELISE	New global network focuses on artificial intelligence for tackling Sustainable Development Goals (SDGs) Elise (elise-ai.eu)
10/05/2022	ALICANTE PLAZA	Nuria Oliver y Ellis Alicante participan en el lanzamiento de la red Naixus: IA y sostenibilidad - Alicanteplaza
11/05/2022	EL PAÍS CV	El foro 'Un mundo de fusión digital' dialoga sobre la unión de humanidades y tecnología Comunidad Valenciana EL PAÍS (elpais.com)
12/05/2022	AYUNTAMIENTO ALICANTE	400 alicantinos y 50 entidades participan en la confección de la Agenda Urbana 2030 Ayuntamiento de Alicante



12/05/2022	20 MINUTOS	Adela Cortina llama a unir Ciencia y Humanidades: "Es la salvación" (20minutos.es)
12/05/2022	SER	Ricardo Mairal, rector de la UNED: "El impacto de la tecnología y la digitalización en nuestras vidas es incuestionable" Actualidad Cadena SER
12/05/2022	SER ALICANTE	Nace NAIXUS, una red de excelencia en IA para "fomentar y desplegar" el bien social y el desarrollo sostenible Actualidad Cadena SER
13/05/2022	EFE CV	Nuria Oliver y Jorge Olcina, entre 400 alicantinos que crearán la Agenda 2030 Sociedad Edición Comunitat Valenciana Agencia EFE
13/05/2022	CLOUD COMPUTING	Lanzamiento de NAIXUS, la Red Global de Centros de Excelencia en Inteligencia Artificial y Desarrollo Sostenible - Revista Cloud Computing
13/05/2022	ESCUDO DIGITAL	Una alicantina impulsa una red internacional de IA (escudodigital.com)
20/05/2022	ETGIC	«El mayor reto de la IA es ser más eficiente energética y socialmente» - Ethic : Ethic
10/06/2022	INFORMACIÓN	Los socialistas del Parlamento Europeo organizan en Alicante una jornada sobre Inteligencia Artificial - Información (informacion.es)
17/06/2022	ELDIARIO.ES	Rodríguez-Piñero: "La universidad, la empresa y la política deben colaborar para convertir a la UE en referente y alternativa a China y EEUU en Inteligencia Artificial" (eldiario.es)
19/06/2022	HERALDO DE ARAGÓN	Yamir Moreno: "La vacuna de Enjuanes podría erradicar la covid" (heraldo.es)
20/06/2022	INFORMACIÓN	Alicante se reivindica en Inteligencia Artificial - Información (informacion.es)
20/06/2022	VALENCIA PLAZA	Angela Impact Economy entra en el mundo del 'software' con un SaaS de sostenibilidad - Valencia Plaza



22/06/2022	EL DIGITAL DE ALBACETE	El impacto de los datos en la sociedad, tema central del primer curso de verano de la UCLM en el Campus de Albacete - El Digital de Albacete
23/06/2022	ALBACETE CAPITAL	El impacto de los datos en la sociedad, tema central del primer curso de verano de la UCLM en el Campus de Albacete – Albacete Capital
26/06/2022	RTVE	Expertos alertan de los problemas que puede tener el metaverso (rtve.es)
29/06/2022	ABC ANTROPÍA	«La huella de carbono de la Inteligencia Artificial es aún muy elevada» (abc.es)
30/06/2022	ABC SOCIEDAD	Haciéndote preguntas: las entrevistas más inspiradoras de la Fundación CEU y ABC
01/07/2022	CEDRO	Inteligencia artificial y sector editorial (cedro.org)
06/07/2022	ELDIARIO.ES	Ximo Puig apuesta por la movilidad sostenible, las energías renovables y la digitalización para afianzar la estrategia empresarial valenciana (eldiario.es)
06/07/2022	AYUNTAMIENTO ELCHE	El alcalde asegura que empresas como PLD Space “impulsan el cambio de modelo productivo en la Comunidad Valenciana” – Ayuntamiento de Elche
07/07/2022	SER	Movilidad sostenible, energías renovables y digitalización para afianzar la estrategia empresarial de la Comunitat Valenciana Actualidad Cadena SER
11/07/2022	THELEADER.INFO	Valencia President Rules Out More Covid Restrictions, For Now - The Leader
11/07/2022	SAFOR GUIA	El Consell no contempla más restricciones por la covid pero sí hace recomendaciones ante el repunte de contagios Saforguia.com Guía referente en La Safor
11/07/2022	20 MINUTOS	AMP.- La Generalitat descarta noves restriccions davant la setena onada i preveu arribar al pic en 10-15 dies (20minutos.es)





13/07/2022	UNIVERSIDAD DE ALICANTE	La Universidad de Alicante y ELLIS Alicante se alían para impulsar la investigación en Inteligencia Artificial. Actualidad Universitaria
13/07/2022	LA VANGUARDIA	La UA y la Fundación Ellis se alían para impulsar la investigación en IA (lavanguardia.com)
13/07/2022	DIARIO INFORMACIÓN	La Universidad de Alicante y la Fundación Ellis se alían para impulsar la investigación en Inteligencia Artificial - Información (informacion.es)
13/07/2022	ALICANTE PLAZA	La Universidad de Alicante y la Fundación Ellis se alían para impulsar la investigación en Inteligencia Artificial - Alicanteplaza
14/07/2022	ALICANTE PLAZA	Aefa Senior celebra un encuentro de verano centrado en la Inteligencia Artificial - Alicanteplaza
04/08/2022	ALICANTE PLAZA	Ellis Alicante organiza el II Simposio Doctoral Ellis sobre Inteligencia Artificial en la UA - Alicanteplaza
04/08/2022	EL PERIODIC	ELLIS Alicante organiza el II Simposio Doctoral ELLIS sobre Inteligencia Artificial en la Universidad de Alicante (elperiodic.com)
06/08/2022	DIARIO INFORMACIÓN	El primer Fórum Europeo de Inteligencia Artificial centrado en salud llega a Alicante en septiembre - Información (informacion.es)
09/08/2022	AQUÍ EN ALICANTE	«Hemos puesto a Alicante en la Champions League de la inteligencia artificial» - AQUÍ Medios de Comunicación (aquimediosdecomunicacion.com)
16/08/2022	EL MUNDO	Si tuviéramos que crear una ciudad de cero hoy, ¿cómo sería? (elmundo.es)
19/08/2022	BIG DATA MAGAZINE	ELLIS organiza su II Simposio Doctoral sobre IA en la Universidad de Alicante - Big Data Magazine
22/08/2022	DIARIO INFORMACIÓN	Respaldo empresarial y tecnológico a la competición de Startups del I Fórum Europeo de IA salud - Información (informacion.es)



25/08/2022	LA OPINIÓN DE MURCIA	Respaldo empresarial a la competición de Startups del I Fórum Europeo de IA salud - La Opinión de Murcia (laopiniondemurcia.es)
25/08/2022	FUNDACIÓN JUAN PERÁN	Fundación Juan Perán Pikolinos Fórum europeo de inteligencia artificial para el bienestar y la inclusión de las personas (fundacionjuanperanpikolinos.org)
25/08/2022	EL PAIS	Menos meta y más con: cinco motivos para cuestionar el metaverso Opinión EL PAÍS (elpais.com)
04/09/2022	SIGLO XXI	Alicante acoge el I Fórum Europeo de Inteligencia Artificial para la Salud, el Bienestar y la Inclusión de las personas (diariosigloxxi.com)
06/09/2022	DIARIO INFORMACIÓN	Lama Nachman: la mujer detrás de la tecnología de Stephen Hawking abrirá el I Forum Inteligencia Artificial - Información (informacion.es)
09/09/2022	DIARIO INFORMACIÓN	Nuria Oliver: "Un algoritmo puede analizar todas las radiografías de pecho del mundo, nosotros no" (informacion.es)
10/09/2022	DIARIO INFORMACIÓN	Avanza la competición de startups del I Fórum Europeo de IA en Salud: Primeras empresas seleccionadas (informacion.es)
12/09/2022	DIARIO INFORMACIÓN	ELLIS Alicante organiza el II Simposio Doctoral ELLIS sobre Inteligencia Artificial en la UA - Información (informacion.es)
13/09/2022	EL PAIS	Comienza el curso: tú a Tecnología, yo a Humanidades Opinión EL PAÍS (elpais.com)
15/09/2022	EL ESPAÑOL DE ALICANTE	La ciudad de Alicante optará a acoger la sede de la Agencia de la Inteligencia Artificial en España (elespanol.com)
15/09/2022	DIARIO INFORMACIÓN	Alicante refuerza su compromiso con la Inteligencia Artificial - Información (informacion.es)
15/09/2022	20 MINUTOS	La Generalitat crea un grupo de trabajo para impulsar la candidatura de la Comunitat Valenciana a acoger la Agencia IA (20minutos.es)



15/09/2022	ES DIARIO	Alicante opta a ser la sede de Agencia de Inteligencia Artificial - ESdiario
15/09/2022	THE WASHINGTON POST	El Washington Post - The Washington Post Podcast
15/09/2022	DIARIO INFORMACIÓN	Alicante, escaparate mundial de la inteligencia artificial - Información (informacion.es)
16/09/2022	DIARIO INFORMACIÓN	La Universidad de Alicante ofrece su suelo al Gobierno para acoger la Agencia Nacional de Inteligencia Artificial (informacion.es)
16/09/2022	APUNT	Núria Oliver, experta en IA: "Qui domine la intel·ligència artificial serà l'amo del món, i la Xina està decidida a aconseguir-ho" - À Punt (apuntmedia.es)
16/09/2022	DIARIO INFORMACIÓN	Nuria Oliver: "No me puedo imaginar un futuro más próspero para la salud que el que nos ofrece la inteligencia artificial" - Información (informacion.es)
16/09/2022	DIARIO INFORMACIÓN	Usar la IA para encontrar al espermatozoide más fuerte y otras aplicaciones - Información (informacion.es)
16/09/2022	SERVIMEDIA	Alicante acoge hoy el I Fórum Europeo de Inteligencia Artificial para la Salud, el Bienestar y la Inclusión de las personas Líder en Información Social Servimedia
18/09/2022	DIARIO INFORMACIÓN	Inteligencia artificial Lama Nachman, la mujer que hizo hablar a Stephen Hawking: "Las posibilidades de la tecnología son infinitas" (informacion.es)
19/09/2022	ABC ESPAÑA	Mazón une a empresas y universidades para que Alicante sea sede de la Agencia Española de Inteligencia Artificial (abc.es)
19/09/2022	VALENCIA PLAZA	Puig, Mazón, Ribó y Barcala piden la agencia de IA para Alicante y Catalá para València - Valencia Plaza
19/09/2022	ALICANTE PLAZA	La Generalitat incluye a universidades y agentes sociales en el plan de la Agencia Estatal de IA para Alicante - Alicanteplaza



19/09/2022	SER	Puig confirma que Alicante será la candidata de la Generalitat para la Agencia de IA - Alicanteplaza
19/09/2022	ALICANTE PLAZA	Alicante, candidata oficial para albergar la sede de la Agencia Estatal de Inteligencia Artificial Actualidad Cadena SER
19/09/2022	DIARIO INFORMACIÓN	ALICANTE CENTRO NACIONAL EN INTELIGENCIA ARTIFICIAL 200 investigadores en Inteligencia Artificial en un momento clave para la candidatura de Alicante (informacion.es)
19/09/2022	ELLIS ALICANTE	ELLIS Alicante hosts the ELLIS Doctoral Symposium on Artificial Intelligence at the University of Alicante European Lab for Learning & Intelligent Systems
19/09/2022	SER	Expertos, estudiantes y empresas analizan en Alicante cómo la inteligencia artificial debe reforzar el bienestar de la humanidad Actualidad Cadena SER
20/09/2022	ALICANTE PLAZA	Nuria Oliver, Torrubia, Desantes y Vicent Botti, el equipo asesor para lograr la sede de la IA en Alicante - Alicanteplaza
20/09/2022	DIARIO DE ALICANTE	La UA acoge el Simposio ELLIS sobre inteligencia artificial con más de 200 estudiantes de doctorado de toda Europa (diariodealicante.net)
20/09/2022	DIARIO INFORMACIÓN	La Inteligencia Artificial, crucial en el futuro de las empresas - Información (informacion.es)
20/09/2022	DIARIO INFORMACIÓN	200 investigadores en Inteligencia Artificial en un momento clave para la candidatura de Alicante - Información (informacion.es)
21/09/2022	EL PERIODIC	Laura Olcina y Ricard Martínez se unen al equipo de expertos que impulsará la candidatura de Alicante como sede de Inteligencia Artificial (elperiodic.com)
21/09/2022	DIARIO INFORMACIÓN	Digitalizar para predecir, prevenir y personalizar con IA - Información (informacion.es)
21/09/2022	DIARIO INFORMACIÓN	Los investigadores reclaman controles para evitar que los algoritmos discriminen - Información (informacion.es)



22/09/2022	DIARIO INFORMACIÓN	Innovación suma a Adela Cortina y Aurelia Bustos en el comité asesor de la candidatura de IA - Información (informacion.es)
22/09/2022	INFORMACIÓN TV	¿ Forum Europeo de Inteligencia Artificial para la salud, el bienestar y la inclusión
22/09/2022	DIARIO INFORMACIÓN	Expertos y jóvenes investigadores hacen de Alicante el epicentro de la Inteligencia Artificial en Europa - Información (informacion.es)
24/09/2022	DIARIO INFORMACIÓN	10 bazas de Alicante para acoger la Agencia de Inteligencia Artificial - Información (informacion.es)
25/09/2022	ALICANTE PLAZA	Tener estrategia (previa) y retener talento, las fortalezas de Alicante para acoger la Agencia de IA - Alicanteplaza
25/09/2022	RTVE RADIO	Fundación ELLIS Alicante - Nuria Oliver (rtve.es)
26/09/2022	DIARIO INFORMACIÓN	Bueno integra a Mazón y Barcala en el comité para la sede de Inteligencia Artificial - Información (informacion.es)
27/09/2022	TELE ELX	Nuria Oliver, la mayor experta en Inteligencia Artificial, se implica en la candidatura de Alicante - TeleElx
28/09/2022	LA VANGUARDIA	China tiene un problema con sus mejores estudiantes (lavanguardia.com)
01/10/2022	EITB.EUS	Entrevista con Nuria Oliver, Mas Que palabras, A Tres bandas (eitb.eus)
03/10/2022	ONDA REGIONAL	Nuria Oliver apuesta por una gobernanza democrática basada en datos e Inteligencia Artificial ORM
03/10/2022	COPE CARTAGENA	Nuria Oliver aboga por una gobernanza democrática basada en datos e Inteligencia Artificial - Cartagena - COPE



03/10/2022	LA VERDAD	Los rectores alertan de la situación crítica de las cuentas de la UMU y la UPCT, que solo permiten llegar a diciembre La Verdad
03/10/2022	AYUNTAMIENTO CARTAGENA	La UPCT celebra el solemne acto de apertura del curso académico con demandas de una mejor financiación Ayuntamiento de Cartagena
04/10/2022	MURCIA.COM/CARTAGENA	CARTAGENA / La lección magistral aboga por una gobernanza democrática basada en datos e Inteligencia Artificial - murcia.com
04/10/2022	DIARIO INFORMACIÓN	Barcala defiende en Alicante Futura no caer en el "contagio general" de la tecnología - Información (informacion.es)
04/10/2022	ELLIS SOCIETY	ELLIS Doctoral Symposium 2022: 150 PhD students and leading AI researchers discuss the latest findings in Alicante European Lab for Learning & Intelligent Systems
06/10/2022	EL ESPAÑOL	Foro Económico Alicante (2022) - EL ESPAÑOL (elespanol.com)
08/10/2022	EL ESPAÑOL	Josefina Bueno y Nuria Oliver analizan la aplicación de la Inteligencia Artificial para contribuir a mejorar el bienestar de las personas (elperiodic.com)
11/10/2022	FORBES	Alicante consolida su posición como centro de innovación tecnológica - Forbes España
12/10/2022	EL ESPAÑOL	Alicante ante el reto de la Inteligencia Artificial: "Solo con dinero público no se puede competir" (elespanol.com)
13/10/2022	INFORMACIÓN	Torre Juana saca pecho de sus logros para apoyar la candidatura de Alicante a la Agencia de Inteligencia Artificial - Información (informacion.es)
13/10/2022	REGIONDIGITAL.COM	Unas jornadas abordarán en Mérida la empleabilidad y transformación digital de las pymes (regiondigital.com)
14/10/2022	BUSINESS INSIDER	Distrito Digital Puerto de Alicante: Sede 5, núcleo de tecnología e innovación Business Insider España



14/10/2022	ALICANTE PRESS	AlicanTEC presenta su nueva junta directiva y retos futuros ALICANTE PRESS Noticias de Alicante, Comunidad Valenciana
14/10/2022	INTERCOMARCAL TV	AlicanTEC presenta su nueva organización orientada a los retos actuales y futuros de la provincia de Alicante - Actualitat de l'Alt Vinalopó, el Vinalopó Mitjà, l'Alcoià, El Comtat i l'Alacantí (intercomarcal.com)
15/10/2022	ALICANTE PLAZA	Proyecto Nicolla: una red para el aprendizaje de cuidados innovadores a través de laboratorios - Alicanteplaza
15/10/2022	VALENCIA PLAZA	Proyecto Nicolla: una red para el aprendizaje de cuidados innovadores a través de laboratorios - Valencia Plaza
16/10/2022	LA VANGUARDIA	CaixaForum acoge un ciclo para reflexionar sobre el uso y poder de las pantallas en la vida diaria (lavanguardia.com)
16/10/2022	HOY EXTREMADURA	Las pymes tienen una cita con la empleabilidad y la transformación digital y 95 ponentes de primer nivel en Mérida Hoy
18/10/2022	EUROPA PRESS	ITI reúne a pymes españolas y a agentes europeos para resolver los retos de la compartición de datos (europapress.es)
20/10/2022	LA VANGUARDIA	Los desafíos para lograr una buena inteligencia artificial (msn.com)
20/10/2022	CUBA ES EURO	Los desafíos de lograr una buena inteligencia artificial - . (eseuro.com)
21/10/2022	INFORMACIÓN	Tecnología Alicante: AlicanTEC reorganiza su estructura para impulsar el sector tecnológico en la provincia (informacion.es)
25/10/2022	INDEPENDIENTE	La apuesta pública por la IA: un excelente aliado para la transformación digital de nuestro territorio (elindependiente.com)
25/10/2022	INFORMACIÓN	Ellis Alicante y el tenista Ferrero, premiados del Consejo Social de la UA (informacion.es)





28/10/2022	CADENA SER	El Consell aprueba presentar la candidatura de Alicante como sede de la Agencia Española para la Supervisión de Inteligencia Artificial Actualidad Cadena SER
28/10/2022	INFORMACIÓN	Alicante Inteligencia Artificial: Ciudades que compiten con Alicante para sede de la IA (informacion.es)
28/10/2022	GVA	Detalle nota de prensa - Comunica GVA - Generalitat Valenciana
28/10/2022	ALICANTE PLAZA	El Consell refuerza la investigación en IA con 1,5 millones para la unidad Ellis asentada en Alicante - Alicanteplaza
28/10/2022	DIARIO DE ALICANTE	El Consell financia con 1,5 millones la investigación en Inteligencia Artificial de la Unidad ELLIS Alicante (diariodealicante.net)
31/10/2022	DIARIO CRÍTICO	Una inteligencia artificial se presenta como candidata a las elecciones en Dinamarca Diariocrítico.com (diariocritico.com)
31/10/2022	INFORMACIÓN	El Consell financia con 1,5 millones la investigación en IA de la Fundación Ellis Alicante - Información (informacion.es)
03/11/2022	INFORMACIÓN	Educación Alicante: Premios académicos del Consejo Social de la Universidad (informacion.es)
04/11/2022	ALICANTE PLAZA	Alicante puja por situar la sede de AESIA en el Puerto avalada por su red innovadora y la unidad - Alicanteplaza
04/11/2022	EL ESPAÑOL	Alicante, "entre las favoritas" para convertirse en sede de la Agencia Española de la Inteligencia Artificial (elespanol.com)
04/11/2022	INFORMACIÓN	El puerto, apuesta del Consell para la Agencia de Inteligencia Artificial (informacion.es)
04/11/2022	ALICANTE PRESS	El Puerto de Alicante podría albergar la sede de la Agencia de Inteligencia ALICANTE PRESS Noticias de Alicante, Comunidad Valenciana



04/11/2022	ES DIARIO	"Alicante es lo inteligente", Puig respalda la candidatura IA - ESdiario
04/11/2022	EUROPA PRESS	Alicante opta a ser sede nacional de la AESIA con un proyecto "sólido" y "potente" que lleva la IA en su ADN (europapress.es)
05/11/2022	VALENCIA PLAZA	Alicante puja por situar la sede de AESIA en el Puerto avalada por su red innovadora y la unidad - Valencia Plaza
05/11/2022	INFORMACIÓN	El Consejo Social de la UA galardona la implicación universitaria y social - Información (informacion.es)
11/11/2022	LA VANGUARDIA	Puig dice que la I+D+i es "una prioridad pública" y destaca "el liderazgo" de la Comunitat Valenciana (lavanguardia.com)
11/11/2022	INFORMACIÓN	Innovación Alicante: Puig destaca el liderazgo de la Comunidad en innovación (informacion.es)
11/11/2022	EL PERIODIC	El talento de la Universidad de Alicante brilla en la gala de entrega de los Premios del Consejo Social de la UA (elperiodic.com)
13/11/2022	IDEAL GRANADA	Alicante se perfila como el rival a batir por Granada en la lucha por la agencia de inteligencia artificial Ideal
15/11/2022	ALICANTE PLAZA	El Consell lanza un Observatorio de la IA para que impulse el crecimiento económico y evite sesgos - Alicanteplaza
16/11/2022	INFORMACIÓN	Alicante, sede natural de la inteligencia artificial - Información (informacion.es)
16/11/2022	INFORMACIÓN	El valor de las tecnologías disruptivas para mejorar el mundo I - Información (informacion.es)
16/11/2022	LA VANGUARDIA	Lola Monterola y Diego Megía, Fundación YBS, Fundación Unidad Ellis Alicante y Fundación Llorente y Cuenca, galardonados por la AEF (lavanguardia.com)

NEWS

17/11/2022	RTVE PLAY RADIO	Mujeres referentes. ¿Nos lo ponen más fácil? (rtve.es)
17/11/2022	EUROPA PRESS	Lola Manterola y Diego Megia y las fundaciones YBS, Unidad Ellis Alicante y Llorente y Cuenca, VII premios de la AEF (europapress.es)
17/11/2022	FUNDACIÓN ELLIS	ELLIS Alicante Unit Foundation awarded the Social Innovation Prize by the AEF European Lab for Learning & Intelligent Systems
18/11/2022	CORRESPONSABLES	Lola Manterola y Diego Megia y las fundaciones YBS, Unidad Ellis Alicante y Llorente y Cuenca se alzan con los VII premios de la AEF Corresponsables.com España
22/11/2022	INFORMACIÓN	Puig presenta en Madrid las candidaturas de Alicante y Elche en Inteligencia Artificial y Espacial (informacion.es)
22/11/2022	EL ESPAÑOL	Alicante y Elche presentan sus avales en Madrid para ser las sedes de la Inteligencia Artificial y Espacial (elespanol.com)
23/11/2022	ONDA CERO	La Generalitat creará una oficina interregional en caso de que Alicante sea la sede de la Agencia Española de Supervisión de la Inteligencia Artificial Onda Cero Radio
23/11/2022	BIG DATA MAGAZINE	La Fundación Unidad ELLIS Alicante, dedicada a la IA, premio Innovación Social de la AEF - Big Data Magazine
23/11/2022	COMPROMISO RSE CUSTOMEDIA	Lola Manterola y Diego Megia, y las fundaciones Youth Business Spain Unidad ELLIS Alicante y Llorente y Cuenca, galardonados con los Premios (Acción Social) :: Compromiso RSE
24/11/2022	VALENCIA PLAZA	Opinión Diez ideas para diversificar nuestro tejido productivo. Por Eugenio Mallol - Valencia Plaza
25/11/2022	INFORMACIÓN	Diez tecnologías emergentes que cambiarán España - Información (informacion.es)
29/11/2022	VALENCIA PLAZA	Evap valora en su 20 aniversario "la lucha por situar a la mujer en la empresa" e invita a seguirla - Valencia Plaza



29/11/2022	AYUNTAMIENTO ALICANTE	Alicante Technology Forum arranca este martes con medio centenar de actividades gratuitas Ayuntamiento de Alicante
30/11/2022	SERVIMEDIA	Más de 300 personas asisten a #Demos2022, la cita de referencia del sector fundacional en España Líder en Información Social Servimedia
01/12/2022	ELLE	Nuria Oliver: "Los algoritmos definen la belleza"
02/12/2022	INFORMACIÓN	Francisco Mojica y Nuria Oliver, broche de oro al Alicante Technology Forum - Información (informacion.es)
04/12/2022	INFORMACIÓN	Inteligencia Artificial Alicante: Innovación dota presupuestos con 9 millones (informacion.es)
06/12/2022	INFORMACIÓN	¿Por qué Elche y Alicante no han conseguido las agencias espacial y de IA? (informacion.es)
16/12/2022	CORRESPONSABLES	"Necesitamos una Inteligencia Artificial que respete los derechos humanos, diversa, inclusiva y sostenible" Corresponsables.com España

vision





8.

COLLABORATIONS AND ALLIANCES

ANNUAL
REPORT
2022

During the year 2022, ELLIS Alicante has maintained three major scientific collaborations at European level that are an integral part of its research activity:

1

In 2022, Dr. Oliver's leadership of the Data Science team in the fight against COVID-19, a diverse and multidisciplinary team composed of researchers from different universities and research centres in the Valencian Community, has concluded, with the objective of supporting decision making related to the pandemic through data analysis and Artificial Intelligence.

Data Science against COVID-19 Task Force

This team is formed by the following researchers:

- Universitat Jaume I: Joaquín Huerta Guijarro, Marina Martínez García, Juan Camilo Gómez Esguerra, Emilio Sansano Sansano, Rubén Femenía Carrascosa.
- Universidad de Alicante: Francisco Javier Escolano Ruiz, Miguel Ángel Lozano Ortega, Juan Carlos Trujillo Mondéjar.
- Miguel Hernández University: Alejandro Rabasa Dolado, Aurora Mula Leal, Jose Xavier Barber Vallés, Kristina Polotskaya, Elisa Espín Gallardo.
- Universitat Politècnica de València: José Alberto Conejero Casares, Miguel Rebollo Pedruelo, Manuel Guillermo Portolés, Víctor de Elena, Miguel Ángel García-March, Oscar Garibo Orts, Eloy Piñol Jiménez.
- CEU Cardenal Herrera University: Antonio Falcó Montesinos.
- FISABIO: Adolfo López Cerdán.

The results of the collaborative research of this team have been presented in the research projects section.

2

As a member of the European ELLIS network of scientific excellence, the ELLIS Alicante Unit has participated and contributed to this network through different activities.



ELLIS Europe

ELLIS Europe Board Membership

Firstly, through Dr. Oliver's participation in the ELLIS Europe governing body as vice-president. This position entails participation in weekly working meetings to plan and organise the activities and actions launched by ELLIS Europe in its different pillars: ELLIS research programs, ELLIS PhD program, ELLIS units and external relations. In addition to the weekly meetings, Dr. Oliver has given talks in different forums to present ELLIS and ELLIS Alicante, including:

- Dr. Oliver gives an invited talk on "ELLIS: Towards competitive AI research in Europe" at the Congress on European Artificial Intelligence Policy, Alicante, Spain, 17 June 2022.
- Dr. Oliver gives an invited lecture at the NiCColla project congress on "Towards European Sovereignty in AI", Alcoy, Spain, 29 September 2022
- Dr. Oliver is invited speaker at the EL ESPAÑOL Economic Forum on "ELLIS: Towards competitive AI research in Europe", Alicante, Spain, 11 October 2022
- Dr. Oliver is invited speaker at V Artificial Intelligence Conference on "ELLIS, The European Laboratory for Learning and Intelligent Systems", Alicante, Spain, 7 November 2022
- Dr. Oliver gives an invited lecture on "ELLIS: The European Laboratory for Learning and Intelligent Systems" at the Alicante Technology Forum, Alicante, Spain, 2 December 2022

Human-centric Machine Learning ELLIS Research Program

Secondly, ELLIS Alicante actively contributes to the ELLIS Human-centric Machine Learning (HCML) research program, as Dr. Oliver is co-director of this program, together with Prof. Plamen Angelov from Lancaster University (UK) and Prof. Adrian Weller from Cambridge University and the Alan Turing Institute (UK). The ELLIS HCML program has organised two international workshops in 2022:

Workshop (online format) on "Human-centred AI" within NeurIPS 2022, held on December 9, 2022 (<https://hcai-at-neurips.github.io/site/>). NeurIPS is one of the most prestigious Artificial Intelligence conferences in the world. This workshop featured invited papers from six leading researchers in human-centred Artificial Intelligence: Asia Biega from the Max Planck Institute, Timnit Gebru from DAIR, Lauren Klein from Emory University, Mary Lou Maher from the University of North Carolina, Joonhwan Lee from Seoul National University, and Fernanda Viegas from Harvard University. It also included the presentation of papers selected from those submitted by different researchers to participate in the workshop.

Workshop (in-person and online format) on "Human-machine Collaboration and Teaming" within ICML 2022 that took place on July 23, 2022 (<https://sites.google.com/view/icml-2022-hmcat/home>) featuring invited talks from 10 excellent researchers in human-centred Artificial Intelligence, including Dr. Wendy Mackay from Paris-Saclay University, Fernanda Viegas from Harvard University and Google or Martin Wattenberg from Harvard University and Google.

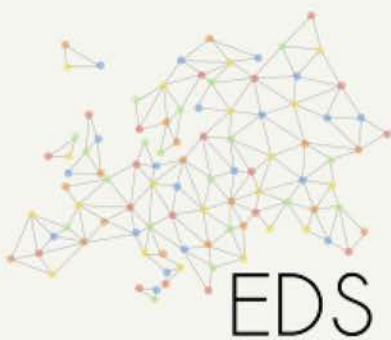


ELLIS PhD Program

Third, the ELLIS Alicante Foundation is an active participant in the ELLIS PhD program as the primary institution for 5 of the students in the program, as well as the secondary host institution for two more students. All students in the ELLIS PhD program are co-supervised and are attached to a primary and a secondary institution, where they stay for a minimum of 6 months.

The ELLIS PhD program aims to generate synergies among all its students and between them and the researchers members of the ELLIS network, as an essential part of its objective to create a highly collaborative and structured research fabric in Europe. .

In addition to hosting these doctoral students, ELLIS Alicante has been the organiser of the II ELLIS Doctoral Symposium as described above.





In May 2022, ELLIS Alicante together with 3 other institutions of worldwide relevance (IRCAI, CETIC and Data-Pop Alliance) and under the auspices of UNESCO launched NAIXUS (<https://naixus.net>), an international network of scientific excellence in Artificial Intelligence for Sustainable Development.

NAIXUS Network

It is estimated that by 2030, AI will influence and impact the lives of more than 8.5 billion people, across all sectors, and in diverse human and terrestrial ecosystems on an unprecedented scale. According to a study published in Nature, AI could help achieve 79% of the Sustainable Development Goals (SDGs), more specifically, it can enable the achievement of 134 targets across all goals, but it can also inhibit 59 goals.

Because the challenges associated with sustainable development affect all countries in different ways at the macro and micro levels, each country is developing its own scientific expertise in AI on a particular set of development problems. Some of these overlap across continents and regions, others are location specific. Therefore, there is an opportunity to connect research groups working on this topic and leverage different solutions, case studies, skills and competencies in the development and AI domain. That is the goal of NAIXUS, so as to foster the use of AI for Social Good.

Collaborations



During the year 2022, ELLIS Alicante has collaborated and established alliances with different researchers affiliated to the following academic, scientific and corporate entities.

Scientific Advisory Board

**The
Alan Turing
Institute**



MIT Connection Science
the technology of innovation



Cornell University



FONDAZIONE
BRUNO KESSLER



European
Commission



MAX PLANCK INSTITUTE
FOR SOFTWARE SYSTEMS



Universitat
Pompeu Fabra
Barcelona



CSIC

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

Collaboration agreements



Memberships



Collaborator



Research projects



Scientific publications

Below is a list of some of the entities with which we have collaborated in the publication of scientific articles in 2022:



OSLOMET



Politecnico
di Torino

der Bundeswehr
Universität  München

US
UNIVERSITY
OF SUSSEX



Ben-Gurion University
of the Negev





Scientific communication and dissemination activities



ELLIS 2022 Doctoral Symposium



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SIEMENS

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VOICEMOD





9.

ANNUAL
REPORT
2022

AWARDS AND RECOGNITION

2022 has been a uniquely special year, as the Foundation has received exceptional recognition:

Social Innovation Award of the Spanish Association of Foundations (November 2022)

The ELLIS Alicante Foundation receives the 2022 Social Innovation Award from the Spanish Association of Foundations for the successful practical application to social innovation of its research work in Artificial Intelligence in the fight against the coronavirus pandemic.




Awards ceremony at the AEF congress #Demos22 (Madrid).

University Involvement Award from the University of Alicante Social Council (November 2022)

ELLIS Alicante Foundation receives the University Involvement Award 2022 from the Social Council of the University of Alicante. This award is a recognition of ELLIS Alicante's commitment to the University of Alicante and its spirit of collaboration with the University.



Awards ceremony at Casa Mediterráneo (Alicante).

Thank you ... 

10. FUNDING AND SPONSORSHIPS

ANNUAL
REPORT
2022

Sponsorships

Public Entities



**GENERALITAT
VALENCIANA**

Conselleria de Innovación,
Universidades, Ciencia
y Sociedad Digital



Unión Europea
Fondo Europeo de Desarrollo Regional

To comply with the Valencian Strategy for Artificial Intelligence published in 2020 and approved by the Consell on May 13, 2022, the Administration of the Generalitat Valenciana committed among its actions to financially support with 1.5 million euros per year the "Creation of an ELLIS unit [European AI research centre] that allows us to collaborate with the best researchers in Europe and promote the synergy of AI research with the entrepreneurial ecosystem and the transfer of research."

The Generalitat Valenciana has thus become an outstanding ally, along with other European public institutions, for the achievement of the ambitious objectives of the ELLIS network at international level, especially that of generating a European regional counterweight that allows to retain, attract and train excellent research talent in Artificial Intelligence and thus contribute to the better economic development of our society.

This commitment was initially specified in the Resolution of June 22, 2020, of the Regional Minister of Innovation, Universities, Science and Digital Society, which approves the Strategic Plan of Grants for the period 2020-2023.

In 2022, ELLIS Alicante received a nominative grant instrumented through a "Singular agreement between the Generalitat, through the Conselleria de Innovación, Universidades, Ciencia y Sociedad Digital, and the Fundación de la Comunitat Valenciana Unidad ELLIS Alicante, to collaborate in the financing of its operation and for the promotion of research in artificial intelligence, during the year 2022", signed in Alicante on November 21, 2022 in the amount of €1,500,000.

Private Entities



In order to help the ELLIS Alicante Unit Foundation carry out its mission, there are different possible forms of contributions and donations from companies and other collaborating institutions, aligned with the ELLIS Europe sponsorship program.

We are tremendously grateful for the generous contributions of our donors and patrons. Your support of ELLIS Alicante's mission, vision and activity is instrumental to the success of our organisation.

Gracias!

Silver

**B Sabadell
Fundación**

Micro-funding


ANGELA
IMPACT ECONOMY

 **FUNDACIÓN
ESPERANZA
PERTUSA**

int.


Registradores
DE ESPAÑA


COLEGIO MAYOR



INVERSIÓN INDEPENDIENTE



Competitive funding

ELLIS Alicante has received competitive funding for the development of collaborative research projects from the following entities:



Collaborate with ELLIS Alicante

We are looking for collaborators to join our research project on ethical, responsible and Social Good Artificial Intelligence. If you share our vision and want to be part of a sustainable future with AI, below we summarise different sponsorship options to ELLIS Alicante that we can customise to meet the needs of your organisation.

Collaborate with the ELLIS network

Sponsors of the ELLIS network of scientific excellence include some of the major players in industry and technology. All sponsors of the ELLIS Alicante Unit from Bronze level onwards also become ELLIS sponsors and have access to the benefits offered by the European network. Collaborating with ELLIS Alicante means contributing to the development and growth of the ELLIS network through the ELLIS PhD and postdoctoral programs, research workshops, mobility and exchanges and all the creative networking options offered by the network.

Benefits

Our donors will receive invitations to all public events organised by ELLIS Alicante, without restrictions. All will receive a distinctive pin and explicit recognition, depending on their level of sponsorship, in the foundation's annual report of activities. In addition, they will benefit from attractive tax deductions for donations made to a non-profit foundation.

¿Interested?



PLEASE VISIT OUR WEBSITE:
WWW.ELLISALICANTE.ORG/COLABORA
OR WRITE TO:
DONATE@ELLISALICANTE.ORG



Sponsorship Levels

LEVEL	ANNUAL CONTRIBUTION	BENEFITS
PLATINUM	500,000 euro first year 200,000 euro next years (min 2 years) + 20,000 euro contribution to ELLIS Europe + VAT	<ul style="list-style-type: none"> • Option to have a seat on the board of trustees • Option to name an event, lab, award, or scholarship • Privileged access to the ELLIS network of experts • Privileged access to the latest advances in AI • Option to propose challenges and fund or collaborate on research projects that are aligned with the Foundation's objectives • Joint organization and/or participation in workshops, bootcamps, panels, conferences and symposia • Yearly talks delivered by the ELLIS Alicante scientists • Collaboration in CSR programs • Option to propose internships for the PhD students • Unlimited visits to ELLIS Alicante • Logo in all communication material • Option to publish content in the ELLIS newsletter
GOLD	100,000 euro per year + 20,000 euro contribution to ELLIS Europe + VAT (Total contribution is equivalent to the partial funding of 4 PhD scholarships or 2 postdocs)	<ul style="list-style-type: none"> • Privileged access to the ELLIS network of experts • Privileged access to the latest advances in AI • Option to propose challenges and fund or collaborate on research projects that are aligned with the Foundation's objectives • Joint organization and/or participation in workshops, bootcamps, panels, conferences, and symposia • Yearly talks delivered by the ELLIS Alicante scientists • Collaboration in CSR programs • Option to propose internships for the PhD students • Annual visit to ELLIS Alicante with other gold sponsors • Logo in all communication material • Option to publish content in the ELLIS newsletter
SILVER	50,000 euro per year + 10,000 euro for ELLIS Europe + VAT (Total contribution is equivalent to partial funding of 2 PhD scholarships or 1 postdoc)	<ul style="list-style-type: none"> • Joint organization and/or participation in workshops, bootcamps, panels, conferences, and symposia • Collaboration in CSR programs • Option to propose internships for the PhD students • Logo in all communication material • Option to publish content in the ELLIS newsletter
BRONZE	25,000 euro per year + 5,000 euro for ELLIS Europe + VAT (Total contribution is equivalent to partial funding of 1 PhD scholarship or 1 postdoc)	<ul style="list-style-type: none"> • Preferential access to education actions • Collaboration in CSR programs • Option to propose internships for the PhD students • Logo in all communication material • Option to publish content in the ELLIS newsletter
FRIENDS	5,000 – 25,000 euro	<ul style="list-style-type: none"> • Acknowledgement in the annual report and the website
MICRO-FINANCING	Up to 5,000 euro	<ul style="list-style-type: none"> • Acknowledgement in the annual report and the website

Acknowledgements



... to all ELLIS Alicante staff, members of the Board of Trustees, collaborators, institutions, organisations, suppliers, professionals, donors, family and friends, for your continuous support in our daily work.

Thank you for making ELLIS Alicante possible.



e l l i s
ALICANTE unit

**Fundación de la Comunitat Valenciana
Unidad ELLIS Alicante**

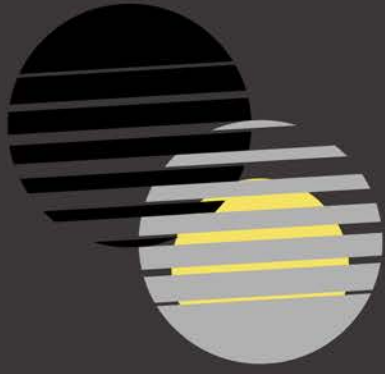
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2022



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