EXPERT GUIDE ON ARTIFICIAL INTELLIGENCE FOR THE MEDIA

Universidad de Navarra

This guide brings together professors and researchers from different institutes, research centers and centers related to the Universidad de Navarra and their areas of specialization in artificial intelligence. It is oriented to provide a service to the media.

More than ten faculties and different research centers lead this list of experts in topics that concern AI in the different branches of knowledge, as well as the new challenges that are generated by the evolution of this tool. These researchers are active in the study of AI in fields such as medicine, industry, law and legislation, economics and business, ethical and anthropological challenges, journalism and education.

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To arrange interviews, please contact: prensa@unav.es or telephone 948 425753.

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Cima Universidad de Navarra

01. Mikel Hernáez

Director of the Computational Biology Program at Cima Universidad de Navarra.

■ **Development of predictive computational models based on AI and deep learning.**

02. Carlos Ortiz de Solórzano

Director of the Biomedical Engineering Program at Cima Universidad de Navarra.

■ **AI-based biomedical image analysis and quantification tools.**

03. Antonio Pineda-Lucena

Director of the Technological Innovation Division at Cima Universidad de Navarra.

■ **New technological capabilities and latest generation tools to boost therapeutic solutions.**

Clínica Universidad de Navarra

04. Elena Faedda

Director of the Information System at Clínica Universidad Navarra.

■ **Integration of solutions due to the application of artificial intelligence in the health sector within hospital systems.**

05. Josep Maria Gost

Director of the Information System at Clínica Universidad de Navarra.

- **Integration of solutions due to the application of artificial intelligence in the health sector within hospital systems.**

06. Julián Sanz

Co-director of the Anatomical Pathology Service of Clínica Universidad de Navarra.

- **Artificial intelligence and disease diagnosis.**

Tecnun-School of Engineering / Ceit Technology Center Association

07. Iker Aguinaga

Senior researcher at Ceit and collaborating professor of Reinforcement Learning at Tecnun.

- **AI in industrial applications. He works in the development of artificial intelligence methods that support workers in the performance of complex tasks, such as the evaluation of manufacturing or construction processes, maintenance tasks, etc.**

08. Aiert Amundarain

Senior researcher at Ceit.

- **AI in industry: Study of artificial intelligence techniques applied to the reconstruction and geometric analysis of 3D environments. His group is focused on applying these advances in the field of dimensional metrology and monitoring of industrial processes. It involves the integration of AI models that process spatial data to obtain accurate and detailed representations of physical space, which is crucial to ensure quality and precision in manufacturing and industrial production.**

09. Saioa Arrizabalaga

Director of the Data Analytics and Information Management research group (Ceit), member of the advisory board of the Institute of Data Science and Artificial Intelligence (DATAI), associate professor at the School of Engineering (Tecnun).

AI and cybersecurity in industry. Her group researches the application of ML/IA technologies to improve the efficiency of production processes. They also address cybersecurity in industrial environments, application of AI for anomaly detection and blockchain technologies.

10. Diego Borro

Principal investigator at Ceit and associate professor at the School of Engineering (Tecnun) accredited as professor. Associate member of the Institute of Data Science and Artificial Intelligence (DATAI).

AI in Engineering. He focuses on advanced image processing algorithms applied mainly to problems of defect detection, high precision dimensional control and robotic perception of the environment. In relation to ethics, it also addresses techniques that provide transparency and explainability with the aim of detecting biases in AI algorithms.

11. Alfonso Brazález

Director of the Transport and Sustainable Mobility research group at Ceit. Principal Investigator.

AI in mobility. AI for mobility analysis of people and vehicles. AI for infrastructure monitoring.

12. Itxaro Errandonea

Researcher at Ceit, collaborating professor at Tecnun and associate member of the Institute of Data Science and Artificial Intelligence (DATAI).

- **AI applied to industry. Her research area focuses on the creation of new methodologies for the deployment of AI models oriented to detection, diagnosis and prediction applied to different industries such as manufacturing, transportation and the water sector.**

13. Olatz Iparraguirre

Researcher at Ceit.

- **AI applied to the challenges of computer vision. Research focused on the development and application of deep learning algorithms and advanced image processing. Specifically examines the defect inspection systems and process/infrastructure/environment monitoring in the fields of intelligent mobility and Industry 4.0.**

14. Idoia Ochoa

Professor at the School of Engineering (Tecnun).

- **Her research focuses on the development of computational methods to facilitate the storage and analysis of sequencing data, within the area of computational biology. In her research she uses machine learning techniques, statistical techniques, signal processing, information theory and coding.**

15. Francisco Planes

Professor of the School of Engineering (Tecnun).

- **Personalized medicine: cancer and nutrition. His group has developed a pioneering algorithm that generates a ranking of the healthiest foods for each person.**

16. Ángel Rubio

Professor of the School of Engineering (Tecnun) and member of the Advisory Board of the Institute of Data Science and Artificial Intelligence (DATAI).

- **AI applied to personalized medicine and its ethical implications.**

School of Science

17. Sergio Ardanza-Trevijano

Professor of the School of Sciences and Deputy Director of the Institute of Data Science and Artificial Intelligence (DATAI).

- **Fundamentals of AI. Approximate reasoning, mathematical foundations and machine learning optimization. He works on data transformation tools aimed at machine learning / AI that consumes less computational and therefore energy resources.**

18. Arturo Ariño

Professor of Ecology, scientific director of the Science Museum and professor at the School of Science.

- **He conducts research in Ecology and Environment that relies on AI (neural networks, deep learning) for the automatic identification of patterns in data and elements of biodiversity.**

19. Jorge Elorza

Professor of Applied Mathematics at the School of Science.

- **Fundamentals of Fuzzy Logic and Soft Computing as AI tools.**

20. Ángel Garcimartín

Professor of Physics at the School of Science..

- **AI in data processing. Python programming of Machine Learning routines and methods for data and image processing.**

School of Communication

21. Ana Azurmendi

Professor of Constitutional Law at the School of Communication.

- **Legislation in AI and journalism, she can assess legislation related to AI and journalism, also in the digital environment.**

22. Mónica Codina

Professor of Communication Ethics.

- **Deontology and ethics in the use of AI, with emphasis on the field of communication. She focuses on the implications of these new tools in journalism, both in its foundations and in its practice.**

23. Clara González Tosat

Researcher at IBERIFIER and professor of the subject "AI for journalists" at the School of Communication.

- **AI and journalism, its applications in practice and content generation.**

24. Mercedes Muñoz

Professor of Communication Law and Ethics.

- **Legislation in AI and marketing, addresses the legal and ethical use of data in the digital world.**

25. Ramón Salaverría

Full Professor of Journalism at the School of Communication, advisor to the Council of Europe as an expert on the sustainability of journalistic media, and coordinator of IBERIFIER, a digital media observatory in Spain and Portugal, promoted by the European Commission and linked to the European Digital Media Observatory (EDMO).

- **AI and Journalism. Challenges, trends, and the responsible implementation of artificial intelligence systems in the media. He addresses the risks and opportunities of these technologies in newsrooms.**

26. Alfonso Vara

Professor of Journalism, he teaches Economics, Economic Journalism and Final Degree Project of Journalism.

- **He explores the practical applications of AI in Communication and Journalism, illustrating how they can optimize editorial processes, improve content personalization and facilitate data collection and analysis. He also addresses ethical considerations in the use of AI such as privacy, transparency, fairness and accountability.**

School of Law

27. Juan Carlos Hernández

Professor of Administrative Law and Digital Law, co-director of the Master's in Digital Law, and member of the Advisory Board of the Institute of Data Science and Artificial Intelligence (DATAI).

- **Regulation and legislation of AI in the EU, the US and China. Data protection.**

28. Eugenia López-Jacoiste

Full Professor of International Law and International Relations.

- **International Law and AI, application of AI in security and autonomous weapon systems.**

29. Patrick Joseph O'Malley

Professor of Private, International, and Business Law.

- **Corporate governance and AI (as a topic of comparative law), highlights the need to balance the ethical development of AI in the business field through global ethical practices.**

30. Eduardo Valpuesta

Full Professor of Commercial Law and professor and researcher in Business Law, director of the Master's in Digital Law.

- **AI and digital law, also addresses AI applied to commercial law and blockchain technology.**

School of Economics and Business Administration

31. Ignacio Ferrero

Professor of Business Ethics and Leadership and an associate member of the Ethics and Law group of the Institute of Data Science and Artificial Intelligence (DATAI).

- **Ethical challenges in the application of AI in business, biases, and decision-making.**

32. Francesc Pujol

Professor and coordinator of Governance projects.

- **The use of AI in education. He also has edited a practical guide on ChatGPT and its application in teaching and learning.**

33. Ignacio Rodríguez

Professor at the School of Economics and Business Administration and associate member of Fundamentals, research group of the Institute of Data Science and Artificial Intelligence (DATAI).

- **His research interests include signal or time series processing, implementation and application of AI algorithms related to political economy, creation of poverty indicators using urban planning data, and process optimization and automation.**

34. Stella Salvatierra

Professor and deputy director of the Institute of Data Science and Artificial Intelligence (DATAI).

- **AI for productivity improvement in companies.**

35. Alejo Sison

Full Professor of Philosophy, professor of Business Ethics and member of the Advisory Council of the Institute of Data Science and Artificial Intelligence (DATAI).

- **Ethics in AI within the business world, responsible and less discriminatory use in the workplace.**

School of Nursing

36. Miriam Pereira Sánchez

PhD at the School Nursing.

- **AI and its application in the learning of nursing students. Humanization of care versus the application of AI in patient care.**

School of Pharmacy and Nutrition

37. Iñaki Fernández de Trocóniz

Professor of Biopharmacy and Pharmacokinetics.

- **His research interests focus on pharmacometrics and systems pharmacology applied to development of predictive models of disease progression, personalized medicine, and identification of response and prognostic markers integrating IA and ML within the computational framework.**

School of Humanities

38. Alejandro Néstor García

Professor of Sociology at the School of Humanities.

- **AI in education: Trends of this disruptive technology in the transformation of socioeconomic life and especially in the reconfiguration of teaching-learning processes in education.**

39. José Ignacio Murillo

Full Professor at the School of Humanities and principal investigator of "Mente-Cerebro", research group at the Institute for Culture and Society.

- **Assessment of AI from a philosophical and social perspective.**

School of Medicine

40. Luis Echarte

Professor of Philosophy of Medicine and Bioethics. He teaches in the Master in Artificial Intelligence, Master in Biomedical Engineering and Master in Christianity and Contemporary Culture. In addition, he is Coordinator of the postgraduate course Medical Research Methodology.

- **He investigates how AI affects the doctor-patient relationship, emotional artificial intelligence in care robots and how they can transform and even replace interpersonal interaction. It also addresses the use of AI in education and the risk that it may lead to increasingly incompetent generations at the helm of increasingly intelligent computers. He has given this paradox the name "the inversion of the Turing test".**

41. Pilar León

Professor of History of Medicine and Medical Ethics and Member of the Research Ethics Committee.

Ethics in AI and exploitation of large databases in health and biomedical research. New ways of obtaining data and ethical issues related to the use of health data in AI and the relationship between AI and professional responsibility.

Ecclesiastical Studies

42. Santiago Collado

Dean and professor of the School of Ecclesiastical Studies and director of the research group "Science, Reason and Faith".

He approaches the reflection on the attribution of intelligence to a system from a realist-oriented gnoseology, born and developed from Aristotelian proposals. His research focuses on the study of the adequate method to affirm or deny intelligence in a system.

43. Rubén Herce

Professor of the School of Ecclesiastical Studies and member of the Advisory Council of the Institute of Data Science and Artificial Intelligence (DATAI).

Ethical and anthropological challenges presented by AI: the perception of our identity, relationships with others or decision making. It examines the goals it should pursueand why, by whom and how the actions of the agents involved in its development are supervised. He also studies to what extent AI can help to morally improve a society.

IESE Business School

44. Óscar González-Peralta

Senior lecturer.

Ethics in the design and development of AI-based business models, decision making and ethics training for managers.

45. Sampsa Samila

Academic Director of the AI and the Future of Management Initiative and leads the AI for Executives open enrollment program for senior executives. At IESE, Sampsa teaches artificial intelligence, innovation strategy, and competitive strategy in a range of programs from MBA and EMBA to senior executives.

He is particularly focused on how new technologies like AI enable new business models, the challenges of organizing to develop the capabilities and deliver the value, and how to change the mindset of executives to understand the changes brought by these new developments.

46. Javier Zamora

Academic director of IESE's "Leading Digital Change" and "Digital Transformation" executive programs.

Data and artificial intelligence driven organizations and their impact on digital transformation. Addresses the digital transformation of organizations through the knowledge and application of new digital technologies with special emphasis on the redesign of processes and the challenge for top management to develop a digital mindset.

Institute for Culture and Society (ICS)

47. Javier Sánchez Cañizares

Researcher of the Mind-Brain group of the Institute for Culture and Society.

- **Relationship of AI with consciousness, the emergency that originates from this fact and ethics as an indispensable factor to face the situation.**

48. Javier Bernácer

Co-Principal Investigator of the "Mind-Brain" research group of the Institute for Culture and Society.

- **Limits of artificial intelligence, the differences between AI and human intelligence and the specificities of human cognition.**

ISSA School of Applied Management

49. Juan Francisco Carias

ISSA School of Applied Management Professor.

- **Economics and business: Business models with AI, the relationship between AI and the "social gap". He also studies the ethical use of AI in teaching.**

50. Fernando Ruiz

Professor at ISSA School of Applied Management Professor.

- **Ethical use of AI in teaching and Chat GPT as a new tool in education.**

Institute of Data Science and Artificial Intelligence (DATAI)

51. Jesús López Fidalgo

Director of DATAI.

- **AI applied to personalized medicine, Big DATA and tempo-spatial modeling through intelligent subsampling using optimal design of experiments techniques. It also addresses data bias detection and repair techniques and algorithms.**

52. Rubén Armañanzas

Principal Investigator of the Digital Medicine Laboratory at DATAI.

- **AI in medicine. Development of analytical methodologies based on artificial intelligence for biomedical problems. Work with explainable models and uncertainty quantification in prediction problems.**

53. Iván Cordón

Director of Innovation and Technology Transfer of DATAI.

- **He has been leading artificial intelligence projects for more than fifteen years in the academic and business world in four continents. Previously, he worked at Telepizza Group, where he led the Data strategy and AI implementation for the group. An innovator, he considers technology as a fundamental tool for human development.**

54. Edgar Benítez

Researcher at DATAI.

- **His research seeks to overcome the limitations of traditional machine learning models in the identification and analysis of causal inference, thus facilitating evidence-based decision making in various applied areas.**

55. Álvaro Cía

Researcher at DATAI.

AI and Big Data. Addresses the problem of processing large amounts of data. Using Active Learning algorithms, his objective is focused on extracting the most relevant and representative information from large data sets, thus reducing the computational cost required for its analysis.

56. Juan Carlos Gamero

Researcher at DATAI.

His research projects apply AI in architecture and sustainable building design. It serves to identify energy saving measures, multi-objective optimization of design parameters to achieve optimal thermal comfort and natural lighting in social housing. In the use of machine learning to identify parameters that affect the overheating of homes during heat waves.

57. Alberto García

Researcher at DATAI.

Applications of statistical and machine learning techniques in digital medicine, healthcare and biomedical environments. Development of methods for uncertainty quantification in prediction and bias mitigation for the development of fair algorithms.

58. José González Gomariz

Researcher at DATAI.

Development and application of AI models in biomedical data. Search for new biomarkers.

59. Horacio Grass

Researcher at DATAI.

He has been actively involved in the research and development of advanced machine learning techniques, social network analysis and multi-objective optimization.

60. Eduardo Iribas

Researcher at DATAI.

AI in business projects. Integration of AI in projects at a technical level. Data lifecycle in a Data Science project. Generative AI, what is behind LLMs like ChatGPT; productivity increase with Generative AI for business and technical profiles.

61. Marcos López De Castro

Researcher at DATAI.

His research work focuses on teaching "intelligent" machines to learn to say "I don't know" (quantifying the uncertainty in AI predictions). This allows for greater confidence in these machines as they will not be able to make up answers. In particular, he applies this type of algorithms to biomedical data, where quantifying the uncertainty of predictions is of vital importance for the possible implementation of this technology in clinical practice.

62. Elena Martin De Diego

Researcher at DATAI.

Towards more reliable machine learning in business and medical frameworks, understanding reliable as the combination of fairness, robustness and explainability.

63. Montserrat-Ana Miranda

Researcher at DATAI.

- **Development of AI models in Complex Systems with applications in industry (improvement of energy efficiency in buildings and in line production), as well as in the area of medicine for diagnosis and optimization of health resources in hospitals.**

64. Aitor Oviedo

DATAI researcher.

- **Probabilistic graphical models in bioinformatics. Specifically modeling relationships between microRNAs and genes in cancer and other diseases.**

65. José Luis Poveda

DATAI researcher.

- **Analyzing data and surveys to improve business decisions, he applies machine learning techniques to uncover patterns and trends that guide effective strategies. Its research helps companies better understand their customers and optimize their operations.**

66. Francisco Velásquez

Researcher at DATAI.

- **AI in the aeronautical sector, development and trends in the areas of manufacturing, control and performance of civil aircraft in the commercial sector.**

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