

MSCA Postdoctoral Fellowships 2024

The [ADAPT Centre](#) is excited to invite expressions of interest for the competitive and career enhancing 2-year European Postdoctoral Fellowships (PF), a Horizon Europe Marie Skłodowska-Curie Action.

We invite applications from from experienced researchers in the areas of Human Centred AI, e-Health, Blockchain, Disinformation, Cybersecurity, Natural Language Processing, Large Language Models, Data Analytics, Artificial Intelligence, Machine Learning, Human Computer Interaction, Linguistics, Generative AI, Data Governance, Ethics, Edge Computing, geoAI, Knowledge & Data Engineering, Health Informatics, Digital Humanities, Information Retrieval, Privacy, Network Security, Speech, Semantic Web Technologies, eXtended Reality, Personalisation, Computer Graphics, Standardisation and Deep learning.

ADAPT's world-leading academics looking to supervise fellows can be found at the end of this document - click [HERE](#) to read about our experts.

As part of this prestigious Postdoctoral Fellowship you will

1. Have full autonomy to develop a novel proposal aligned with your research career guided by a world leading academic supervisor in your field and an expert research development team
2. Join the [Marie Curie Alumni Association](#), a major platform for researchers to contribute to shaping science policy in Europe, providing career development opportunities and supporting the wider research community on topics affecting research and researchers' lives.
3. Expand the reach of your research through the MSCA programme which is proven to increase citation publication rate in comparison to other schemes
4. Be provided with a generous Mobility and Living Allowance as well as a Family Allowance (where applicable) to enable your relocation to Ireland, the European hub of digital innovation.

[Submit an Expression of Interest](#)

[Learn more about the Scheme](#)

Why ADAPT?

- **Contribute** to the ADAPT research agenda that pioneers and combines research in AI driven technologies: Natural Language Processing, Video/Text/Image/Speech processing, digital engagement & HCI, semantic modeling, personalisation, privacy & data governance.
- **Work** with our interdisciplinary team of leading experts from the complementary fields of, Social Sciences, Communications, Commerce/Fintech, Ethics, Law, Health, Environment and Sustainability.
- **Leverage** our success. ADAPT's researchers have signed 43 collaborative research projects, 52 licence agreements and oversee 16 active commercialisation funds and 52 commercialisation awards. ADAPT has won 60 competitive EU research projects and obtained €35 million in non-exchequer non-commercial funding. Additionally, 9 spinout companies have been formed. ADAPT's researchers have produced over 1,500 journal and conference publications and nearly 100 PhD students have been trained.

About the ADAPT Centre



The ADAPT Centre, funded by Science Foundation Ireland, focuses on developing next generation digital technologies that transform how people communicate by helping to **analyse, personalise** and **deliver** digital data more effectively for businesses and individuals. ADAPT researchers are based in eight leading universities: Trinity College Dublin, Dublin City University, University College Dublin, Technological University Dublin, Maynooth

University, Munster Technological University, Technological University of the Shannon: Midlands Midwest, and the University of Galway.

ADAPT's research vision is to pioneer new forms of proactive, scalable, and integrated AI-driven Digital Media Technology that empower individuals and society to engage in digital experiences with control, inclusion, and accountability with the long-term goal of a balanced digital society by 2030. ADAPT is pioneering new Human Centric AI techniques and technologies including personalisation, natural language processing, data analytics, intelligent machine translation, human-computer interaction, as well as setting the standards for data governance, privacy, and ethics for digital content.

Application Process and Support Offered

Candidates interested in applying for a PF with the ADAPT Centre and any of its affiliated host institutes must fill out and submit the “Expression of Interest” form available on this [link](#)

Candidates will be selected based on eligibility, experience, alignment with ADAPT priorities and proposed supervisor's research interest. The final decision to support a candidate will ultimately be taken by the supervisor and a contract will only be issued if and only if the submitted proposal is selected for funding by the European Commission.

The selected candidates will receive support from ADAPT’s Research Development Team in writing their applications and join a number of working sessions to develop a strong and competitive proposal.

Stages of the Eol process and indicative timeline:

Call for Eols opening	7 March 2024
Submission of Eols to ADAPT	4 May 2024
Review of Eols	Once an Eol is received, a review will be conducted immediately. Should there be an alignment with ADAPT and Supervisor, then a call will be organized with the Supervisor.
Communication of results of internal selection	1 week after meeting with supervisor
Working sessions and support from ADAPT in proposal development	May 2024 until 31 July 2024
Submission of full draft (with final budget) to ADAPT	19 August 2024
MSCA PF submission deadline	11 September 2024 @ 5pm Brussels time.

Funding

Each candidate will apply to the scheme with an ADAPT Centre Supervisor who belongs to one of the 8 institutions affiliated to the Centre, this will be the candidate's host institution.

Should the proposal be successful, the candidate will receive a contract of employment for the period of 2 years, fully funded by the European Commission.

The beneficiary receiving EU funding (The ADAPT Centre through its host Institutions) recruits the researcher (Candidate) for the total period of the fellowship (24 months' duration). This recruitment will only happen if the proposal is selected for funding by the European Commission.

The EU provides the following support:

- a living allowance
- a mobility allowance
- if applicable, family, long-term leave and special needs allowances

In addition, funding is provided for

- research, training and networking activities
- management and indirect costs

Eligibility

Candidates must:

1. Have successfully defended their thesis or have been formally awarded a PhD degree at the time of the deadline.
2. Have a **maximum** of eight years' experience in research, from the date of the award of their PhD degree. Note that years of experience outside research and career breaks will not count towards the above maximum, nor will years of experience in research in countries outside of the EU, for nationals or long-term residents of EU Member States or Horizon Europe Associated Countries who wish to reintegrate to Europe.
3. Should comply with mobility rules: they must not have resided or carried out their main activity (work, studies, etc.) in the country of the beneficiary (Ireland) for more than 12 months in the 36 months (3 years) immediately before the call deadline. Special mobility rules apply for career break and researchers' at risk.

ADAPT Supervisors



Dr Abdelsalam Busalim

TU Dublin

Dr. [Abdelsalam Busalim](#) is an expert in social commerce technologies, specializing in their transformative impact on businesses and consumers. His research interests span sustainable information systems, exploring how technology can be harnessed for environmentally conscious practices, including sustainable consumption behavior in areas such as EV charging and fashion. Dr. Abdelsalam teaches AI Ethics in the Human-centered AI master's program at the School of Enterprise Computing and Digital Transformation, TU Dublin. Dr. Busalim is an

academic collaborator at ADAPT.

For this call, Dr. Busalim is looking for projects in the area of voice commerce in social platforms, personalized AI-driven recommendations in social commerce, applications of AR/VR Try-Ons in social commerce, and social commerce for social good.

Research keywords: Social Commerce, Voice Assistance Applications, AR Commerce, Community Commerce, AI For Social Commerce, Machine Learning, Deep Learning.



Dr Benjamin Cowan

University College Dublin

Dr [Benjamin Cowan](#) is Professor at UCD's School of Information & Communication Studies. He is a Co-PI within the ADAPT Centre, taking on the roles of Interaction & Control Research Challenge lead and NENC lead within the Digital Engagement Strand. He completed his undergraduate studies in Psychology & Business Studies (2006) as well as his PhD in Usability Engineering (2011) at the University of Edinburgh. His research lies at the juncture between psychology, human-computer interaction and communication systems in investigating how design impacts aspects

of user behaviour in social, collaborative and communicative technology interactions. His recent research has focused specifically on how theory and quantitative methods from psychological science can be applied to understand and design more human-centred conversational AI interactions. Dr Cowan is the co-founder and co-director of the HCI@UCD group, one of the largest HCI groups in Ireland, and the Conversational User Interfaces conference series. He is also director of the MSc in Human-Computer Interaction at UCD. Through his research he has collaborated regularly with industry, partnering with companies such as Microsoft Research, Cerego and Voysis.

For this call, Dr Cowan is interested in research projects around the area of human centered issues in collaborative AI, collaborative conversational AI, human-machine dialogue and conversational user interfaces

Research keywords: Collaborative AI, Conversational User Interfaces, Human-Computer Interaction, Psycholinguistics, Cognitive Science, Speech Technology, Dialogue, Human-Machine Dialogue, Cognitive Psychology, Linguistics



Dr Brendan Spillane

University College Dublin

Dr [Brendan Spillane](#) is an Assistant Professor in the School of Information and Communication Studies in University College Dublin (UCD) and a Funded Investigator in the Science Foundation Ireland ADAPT Centre for AI-Driven Digital Content Technology. He completed his PhD in the School of Computer Science and Statistics in Trinity College Dublin on bias, credibility and judgements of news. After completing his PhD, he held concurrent positions as a Postdoctoral researcher on the H2020 PROVENANCE project (<http://www.provenanceh2020.eu/>) developing

tools to detect and warn users of disinformation, and a two-year Government of Ireland IRC Postdoctoral Fellowship.

His work is focused on Human Judgement of Information at the intersection of Human Computer Interaction (HCI), Behavioural Science and Information Science. Common topics in his work include Bias, Credibility, Misinformation and Disinformation, News, and Information Security.

Dr Spillane is the Principal Investigator of the 3-year, €4m, 18 partner Horizon Europe VIGILANT project (www.vigilantproject.eu). The exciting project, which kicked off in November 2022, will equip European Police Authorities with advanced technologies from academia to detect and analyse disinformation campaigns that are linked with criminal activities. His winning proposal received a perfect 15:15 score. He is also a partner in a new 3-year, €3.1m, 15 partner, Horizon Europe Research Innovation Action project called ATHENA (<https://cordis.europa.eu/project/id/101132686>) which is focused on countering disinformation linked to Foreign Information Manipulation and Interference (FIMI) which began in November 2023.

He is also actively involved in developing policy on disinformation through participating in the working group developing the Irish Government's National Counter Disinformation Strategy and in developing European policy and security responses to disinformation and FIMI.

For this call, Dr Spillane is looking for projects focused on:

- Misinformation, disinformation and other related forms of problematic content (e.g., hate-speech, radicalisation, incel, extremist).
- Foreign Information Manipulation and Interference (FIMI)
- Bias, credibility and news in general
- The intersection of HCI and news, specifically relating to the design of news websites and news apps and how humans interact with them
- Chatbots, dialogue and conversational agents and misinformation and disinformation
- Visual, auditory and message cues of disinformation
- Perception of human like agents in information confused environments

Research keywords: Misinformation, Disinformation, Bias, Credibility, News, Information Security, Human Judgement of Information at the intersection of Human Computer Interaction (HCI), Behavioural Science and Information Science.



Dr Brian Davis

Dublin City University

Dr [Brian Davis](#) Assistant Professor in Computing, Dublin City University and member of the SFI funded ADAPT Centre. Prior to taking up my appointment in 2019. He was a Lecturer at the Department of Computer Science, Maynooth University. From June 2014- August 2017, he was a Research Fellow, Adjunct Lecturer and Research Unit Leader at the INSIGHT Center for Data Analytics, NUI Galway (NUIG), where he led the Knowledge Discovery Unit focusing on the specific research areas of:

Natural Language Processing, Data Visualization and Knowledge Discovery from heterogeneous data sources. He was also charged with managing a work package of the SFI Insight Grant. In addition, he was Principle Investigator of two SFI co-funded Targeted Projects (Elsevier and DataLive, respectively), Furthermore I was Coordinator of a 3 year Horizon 2020 Innovation Action – SSIX - Social Sentiment Financial Indexes (Grant No 645425).

While his original core expertise intersects with Natural Language Processing (NLP) and Ontology Development, he has expanded and diversified his research capacity over the years to other fields such as multilingual opinion mining of social media (application in finance, politics and online safety). Philosophically, he is orientated to the practice of NLP engineering, which aims to bridge the gap between computational linguistics/language processing research and the implementation of practical applications with potential real-world use. Examples include pipelined neural architectures for building Data2Text Natural Language Generation (NLG) systems (ii) bias detection and removal with the context of resume text analysis in the hiring and recruitment (iii) applications of NLP to cyberbullying detection in short noisy text..

For this call, Dr Brian Davis is looking for projects focused on

- Applications of Large Language Models to Information Extraction tasks(Relation Extraction/Event Extraction)
- Applications of Large Language Models to under resourced domains: clinical psychology,
- Applications of Large Language Models under resourced languages

Research keywords: Applications of Large Language Models in Low Resource Languages Settings and Domains NLP for Low Resource Domains specifically Mental Health, Clinical Psychology, Applications of Large Language Models to Information Extraction Tasks (Relation Extraction/Event Extraction)



Dr Cathy Ennis

TU Dublin

Dr [Cathy Ennis](#) is a lecturer in the School of Computer Science in TU Dublin and is the programme coordinator for TU Dublin's BSc in Computer Science (Infrastructure). Her research interests are in the development of plausible virtual characters as well as building engaging interactions with and between virtual humans. Dr Ennis is a funded investigator in SFI ADAPT and has had funding awards from the SFI funded D-REAL CRT. She has served as a programme committee member of ACM Symposium on Applied Perception for a number of years and has published in many top tier conferences and journals including IEEE VR and ACM SIGGRAPH.

For this call: Dr. Ennis is looking for projects within VR or games, particularly with a focus on virtual characters across any application e.g., Metaverse or serious games. Examples include looking at employing ML techniques to improve automatic gesture generation, or enhance user engagement/learning with virtual characters.

Research keywords: Virtual Characters, Interactions, Gestures, Virtual Reality, Embodied Conversational Agents, Multi -Modal, Social Vr, Perception, Serious Games, Engaging Avatars.



Prof Dave Lewis

Trinity College Dublin

Prof [Dave Lewis](#) is an Associate Professor at the School of Computer Science and Statistics at Trinity College Dublin where he has served as the head of its Artificial Intelligence Discipline and Director of Ireland's ADAPT Centre for human centric AI and digital content technology research. He investigates open semantic models for trustworthy AI and data governance and contributes to international standards in digital content processing and trustworthy AI.

His research focuses on the use of open semantic models to manage the Data Protection and Data Ethics issues associated with digital content processing. He has led the development of international standards in AI-based linguistic processing of digital content at the W3C and OASIS and contributes to international standardisation of Trustworthy AI at ISO/IEC JTC1/SC42 and CEN/CENELEC JTC21.

For this call, Prof Dave Lewis is looking for projects related to the implementation of the EU AI Act in terms of analysis and tools for protection of fundamental rights in particular and the identification of gaps in existing AI/data risks and quality management in proposed approaches from standardised or proprietary sources.

Research keywords: AI Risk, Trustworthy AI, AI Standards, AI And Data Quality, Data Governance, Fundamental Rights Impact Assessment, AI/Data Management Systems, EU AI Act, Responsible AI Value Chains, Metrology for Trustworthy AI, Public Procurement of AI Systems.



Dr Dympna O'Sullivan

TU Dublin

Dr [Dympna O'Sullivan](#) is Faculty Head of Research at the Faculty of Computing, Digital and Data at TU Dublin. Her research interests are in the area of Health Informatics, in particular in the design, development and evaluation of Decision Support Systems to support clinician and patient decision making. This work involves research across many aspects of the domain including electronic and personal health records, machine learning and intelligent algorithms, explainable AI, sensors and smart home technologies, accessible user interfaces and theories of health behavior change.

For this call, Dr Dympna O'Sullivan is looking for projects in the area of Health Informatics, Clinical Decision Support Systems, Explainable AI, Human Computer Interaction for AI

Research keywords: Health Informatics, Clinical Decision Support Systems, Smart Healthy Spaces, Explainable AI, Machine Learning for Health, Patient Generated Health Data, Assistive Technology, Human Computer Interaction for AI



Dr Fernando Perez Tellez

TU Dublin

Dr. [Fernando Perez Tellez](#) is a lecturer and researcher in Computing at the Faculty of Computing, Digital and Data of the Technological University Dublin. Dr. Perez Tellez has been an active researcher in Machine Learning with a special interest in Natural Language Processing and Data modelling.

He is also an enthusiast of the use of Cloud Computing technologies and Ethical AI. His projects include Health innovation projects which have received awards such as Bright Spark National Innovation Awards. He has industry experience and recently, he has been collaborating with different partners to engage students to do industry projects. Dr. Perez Tellez has also worked with human-computer interaction and advanced projects in applied computational intelligence.

For this call, Dr. Perez Tellez is looking for projects in the area of Natural Language Processing, Text Analytics, Emotion and sentiment analysis, Ethical AI, Responsible AI, Trustworthy AI, Data Modelling, Practical AI in the Healthcare, Cloud Computing.

Research keywords: Natural Language Processing, Online Reputation Management, Privacy-Preserving Machine Learning, Human-centred AI, Responsible AI, AI for Good, Data modelling, Cloud Computing, High-Performance Computing, AI in the healthcare, Compliance.



Prof Gavin Doherty

Trinity College Dublin

Prof [Gavin Doherty](#) is a Professor in Computer Science at the School of Computer Science and Statistics at Trinity College Dublin. He obtained his doctorate at the University of York, UK. He conducts research in the area of Human Computer Interaction (HCI), with a focus on digital health, and leads the Health Technology Design Group at [TCD](#). The ultimate goal of his research is to better understand human interactions with technology, and use this understanding in the design of new technologies. In the area of digital mental health, he has led a team in the development of a series of innovative technology interventions which have had a profound impact on the delivery of digital mental health services worldwide. He led the development of the SilverCloud platform for human-supported online mental health interventions, which has been used to deliver evidence-based interventions to over 1 million people. The focus of his work has been on supporting and extending the reach of mental health professionals, and designing engaging systems in which clients have a greater degree of agency. Recent work has investigated human-centred approaches to the integration of machine learning in mental health. He is a Distinguished Member of the ACM, serves on the ACM Practitioners Board, and is Chair of the ACM Distinguished Speaker Program (<https://speakers.acm.org>). He has published extensively in Human-Computer Interaction and medical informatics venues, including three best papers (top 1%) at the ACM CHI Conference.

For this call, Prof. Doherty is interested in supervising projects in the area of Digital Health which take a Human-Computer Interaction perspective, and particularly Human-Centered AI in Healthcare.

Research keywords: Human-Centered AI, Digital Health, Human-Computer Interaction, User Engagement, User Acceptance, Healthcare, Machine Learning, Artificial Intelligence, Ecological Momentary Intervention, Mental Health, Smartphone, Sensing, Wearables, Just-In-Time Adaptive Interventions.



Dr Haithem Afli

Munster Technological University

Dr [Haithem Afli](#) is a leading expert in Natural Language Processing and applied Artificial Intelligence in Healthcare, Life-science, and Fintech. Dr Afli is lecturing AI within the Computer Science Department of Munster Technological University (MTU) in Ireland and leading the MTU Human Centred AI Research Group, HAI. Dr Haithem Afli is Science Foundation Ireland funded investigator at ADAPT Centre where he is a member of the ADAPT Executive Management Committee, representing MTU. His research interest is primarily focused in the areas of Machine Translation,

Sentiment Analysis, Natural Language Processing and Machine Learning. Dr Afli is a senior IEEE member serving as Editor, Program Chair, Program Committee Member and advisor in many international research conferences and journals. As an academic researcher, Dr Afli is keen to commercialise his research with industry partnerships and is actively involved in managing academia-industry partnership projects including co-founding LinguAnalysis.ai.

For this call, Dr Haithem Afli is looking for projects in the area of NLP applications, AI for Political and Social Sciences, Edge Intelligence, Federated Learning, AI for Computational Biology, AI for Fintech.

Research keywords: Natural Language Processing, Edge Intelligence, Federated Learning, Human Centred Ai, Ehealth, Distributed Collaborative Machine Learning; Split Learning; Multi-Head Split Learning; Parameter Transmission-Based Distributed Machine Learning; Privacy-Preserving Machine Learning; Information Leakage In Distributed Learning.



Dr Harshvardhan Pandit

Dublin City University

Dr [Harshvardhan Pandit](#) is an Assistant Professor at the School of Computing in Dublin City University. His research interests are focused on the application of semantics towards solving real-world challenges associated with privacy, legal and regulatory compliance associated with AI, Personal Data, and consent. His PhD (Computer Science, Trinity College Dublin) explored the application of linked data and semantic web technologies towards GDPR compliance, with a particular focus on consent and provenance. He currently co-chairs the W3C Data Privacy

Vocabularies and Controls Community Group (DPVCG) – which develops interoperable vocabularies for privacy and data protection activities based on legal and practical requirements. He is a member of the National Standards Authority of Ireland and contributes to ISO and EU standardisation activities regarding privacy, information security and AI.

For this call, Dr Harshvardhan Pandit is looking for projects in the following areas

1. Active and applied research relating to modelling regulatory requirements such as those for GDPR and the AI Act, or checking its compliance.
2. Works investigating meaningful consenting practices such as developing better mechanisms for notices, automating expressing choices, and digital assistants that help understand requests, highlight risks, and enforce good privacy and data protection practices.
3. Assisting with risk assessment and management by utilising semantics to identify risks applicable, mitigations, and potential consequences and impacts.
4. Application of semantics, data governance, standardisation, personal data stores, and knowledge graphs in mentioned topics.

Research keywords: GDPR, AI Act, DGA, Privacy, Data Protection, Consent, Semantics, Data Modeling, Schema, Privacy Signals, Internet, Digital Literacy, Risk Management, Impact Assessment, Data Governance, Standardisation, Personal Data Stores, Knowledge Graph



Prof John Kennedy

Trinity College Dublin

[Dr. John Kennedy](#) serves as an Assistant Professor specializing in vibrations, acoustics, and dynamics within the School of Engineering at TCD. Dr. Kennedy has published 95 peer-reviewed journal articles and conference publications. He is a leading expert in noise control, noise modelling, additive manufacture, and aeroacoustics. He actively engages with industry through his role as a member of the Institute of Acoustics. He has successfully secured over €2 million in research funding, with a

notable emphasis on advancing the design and additive manufacture of metamaterials, with €1 million dedicated to this endeavour. His current research focuses on how the latest additive manufacturing technologies can be used to produce novel metamaterials for the control of environmental noise, including optimised design strategies using deep learning. A key focus of his research group is on emerging noise sources such as UAVs, heat pumps, and distributed power generation.

For this call, Dr. Kennedy is looking for projects in the areas of Deep Learning Optimisation of Acoustic Materials Including Metamaterials, Control of Aerodynamic Noise within Uavs or Environmental Noise Modelling of Future Aircraft Concepts.

Research keywords: Metamaterials, Additive Manufacture, Acoustics, Aerodynamics, Noise Control, Environmental Noise Modelling, Uav, Uas, Aircraft Noise, Deep Learning, Turbulence, Aeroacoustics, Building Acoustics, Psychoacoustics, Annoyance



Dr Kapal Dev

Munster Technological University

Dr [Kapal Dev](#) is an Assistant Lecturer at the Department of Computer Science, Munster Technological University (MTU). Previously, he held Postdoctoral positions at MTU and Trinity College Dublin (TCD). Dr Dev has worked as 5G Junior Consultant and Engineer at Altran Italia S.p.A, Milan, Italy on 5G use cases, OCEANS Network as Head of Projects. He was awarded the PhD degree by Politecnico di Milano, Italy in 2019 under the prestigious fellowship of Erasmus Mundus. He holds multiple awards in recognition of his expertise from IEEE, CONNECT Centre and IRC.

Dr Dev has a strong track record in Horizon Europe with over 2 million awarded in funding under Horizon Europe. He is an Academic Collaborator with the ADAPT Centre and Funded Investigator at CONNECT. He is serving as Working Group Member of two COST Actions titled Behavioral Next Generation in Wireless Networks for Cyber Security and Physical layer security for trustworthy and resilient 6G systems. He is a member of P1954: Standard for Self-Organizing Spectrum-Agile Unmanned Aerial Vehicles Communications and is founding chair of IEEE ComSoc special interest group titled as "Industrial Communication Networks" under CSIM technical committee.

He holds multiple Editorial roles in IEEE Consumer Electronics Magazine, NATURE, Scientific Reports, Springer Wireless Networks, IET Quantum Communication, IET Networks, Springer Human-centric Computing and Information Sciences, Area Editor in Elsevier Physical Communication, Technical Committee Member in Elsevier COMCOM, Board member of IEEE Future Directions Newsletter.

Dr Dev has published over 70 plus research papers majorly in top IEEE Transactions, Magazines, and Conferences. He is an expert external evaluator of the most prestigious European Research Council (ERC) starting grant, several MSCA Co-Fund schemes, Elsevier, IET, Springer Book proposals and top scientific journals and conferences. He is a Senior member of the IEEE, and professional member of ACM.

For this call, Dr Kapal Dev is particularly interested in interdisciplinary projects in the area of Industry 5.0, 6G Networks, Data and model Security, Large Language Models (LLMs) targeting SDG goals.

Research keywords: Blockchain, Wireless-AI, Distributed Federated Learning, Human Centric Industry 5.0, LLMs Security, Generative AI, and misinformation, Reliable AI, Private 5G for Industry 5.0, Explainable AI, Edge Intelligence



Dr Kevin Credit

Maynooth University

Dr [Kevin Credit](#) is an Assistant Professor at the National Centre for Geocomputation at Maynooth University and an Academic Collaborator at the ADAPT Centre for Digital Media Technology, in the Digital Content Transformation (DCT) Strand. His ADAPT-related research focuses primarily on using machine learning (ML) and artificial intelligence (AI) approaches to answer questions related to transportation, public health, economic development, and spatial patterns of inequality in urban areas.

In particular, he is interested in how ML and AI methods can be designed to: 1) more explicitly integrate spatial information and spatial ways of thinking, 2) assess problems of causal inference, and 3) provide better insight into the explanatory relationships driving model results. Kevin is currently working on a range of projects and proposals in this area, including the development of an integrated health + environment spatial data dashboard for the Dublin 8 neighbourhood, an AI tool to help increase building energy retrofit uptake, and a method to characterise the built environment, economic, and social 'DNA' of startup neighbourhoods. He is an Affiliate Member of the Maynooth University Hamilton Institute (2022), a Fellow of the Center for Spatial Data Science at the University of Chicago (2021), and received his PhD in Geography from Michigan State University in 2018.

For this call, Dr Kevin Credit is looking for projects from a methodological perspective that are interested in exploring the development of new spatial machine learning, GeoAI, and causal inference methods. In terms of substantive topics, he would be interested in supervising projects related to transportation-land use interactions, social and built environment determinants of health, retail geography, entrepreneurial ecosystems, and analysing urban development patterns and urban dynamics more generally.

Research keywords: Spatial Machine Learning, GeoAI, Causal Inference, Transportation, Land Use, Social Determinants of Health, Retail Geography, Entrepreneurial Ecosystems, Urban Geography



Dr Kevin Doherty

University College Dublin

Dr [Kevin Doherty](#) is AdAstra Assistant Professor of Human-Computer Interaction at the School of Information and Communication Studies at University College Dublin, where his research focuses on advancing a human-centred approach to person-centred care for the digital age — through the design, development and evaluation of digital tools to enhance the clinical practice of healthcare, everyday mental health, and digital wellbeing. Current research projects span the development of digital and AI tools to support the online and face-to-face practice of

therapy, self-report technologies to inform and facilitate access to mental healthcare, and decision-support systems to augment care for chronic, co-morbid conditions.

Kevin brings an interdisciplinary perspective to the practice of health and mental healthcare technology development, informed by a background spanning engineering, computer science and design, embracing a participatory approach to the creative practice of mixed-methods design research, and with a focus on developing caring teams and cultures in close collaboration with patient groups, professionals, and communities of practice. This approach has to date made possible the deployment in clinical practice of multiple, bespoke health technologies; including mobile and clinical interfaces to facilitate access to NHS mental healthcare for women experiencing distress during pregnancy in England, to enhance primary care for patients experiencing ‘severe mental illness’ in Denmark, and to support the conduct of speech and language therapies at the Irish National Rehabilitation Hospital. Through this work, Kevin, his students, academic, industry and clinical collaborators - from Imperial College London to the Technical University of Denmark, Copenhagen University, Microsoft Research Cambridge, Monsenso and many others - have been fortunate to realise together a meaningful impact on the international practice of healthcare — as to see this work recognised in the form of multiple best paper awards at the ACM CHI conference, and the receipt of the 2019 ACM Europe Council Award. Kevin is Director of UCD’s MSc in Human-Computer Interaction Programme, a leading member of the cross-disciplinary HCI@UCD research group, and a member of the AI Healthcare Hub at the UCD Institute for Discovery, the ADAPT Centre’s Health Working Group, UCD’s Community of Practice for Public Engagement, the Irish Chapter of ACM SIGCHI, and the Copenhagen Center for Health Technology.

For this call, Kevin is interested in supervising projects relating to human-centred applications of AI in healthcare, relationship-, person- and patient-centred tools, approaches and paradigms; including to support the online and in-person practice of therapy, creative design research methods; including toolkits to enhance participation in research and foster ethical design values, and self-report (EMA) tools and methods; including to support practices of collaborative self-tracking, self-care, reflection and reminiscence. Kevin welcomes proposals from candidates with backgrounds spanning HCI, computer science, psychotherapy, psychology, and other disciplines, with a passion for advancing a human-centred computer science, fostering interdisciplinary design research practices, and questioning what it means to care.

Research keywords: Human Computer Interaction; Healthcare; Mental Health Technology; Artificial Intelligence; Design Research; Engagement; Self-Report; Decision-Making; Therapy; Positive Computing; Care



Dr Malika Bendeche

University of Galway

Dr [Malika Bendeche](#) is a Lecturer Above the bar at the University of Galway (UoG) and SF Funded Investigator at the ADAPT centre. She is also Co-leader of the Value & Risk Challenge under the Transparent Digital Governance (TDG) strand in the ADAPT centre.

Previously, Malika has held the position of Assistant Professor in the School of Computing at Dublin City University (DCU). Prior to that she was Post-Doctoral Researcher at the Irish Institute of Digital Business (IIDB, dotLab), School of Business, DCU. She was part of the RECAP

Horizon 2020 project that focused on developing the next generation of Cloud/Edge/Fog Computing through Optimisation, Automation and Simulation. She also occupied the position of Post-Doctoral Researcher at the CONSUS research centre, School of Computer Science, University College Dublin (UCD) in collaboration with Origin Enterprises PLC where she worked the application of Statistical Analysis, Machine Learning & Data Mining techniques on real agriculture sensor data to improve sustainable crop production and management techniques. Malika obtained her Ph.D. in Computer Science at Insight Centre for Data Analytics, UCD.

Malika's background is in Big data Analytics, Machine Learning, Data & AI Governance . She designs novel Big Data Analytics and Machine Learning techniques to enhance the capability and efficiency of complex systems, and also leverages complex systems to improve the effectiveness, privacy and trustworthiness of Analytics/Machine Learning techniques.

For this call, Dr Malika Bendeche is interested in projects with a focus on (i) the application of AI & ML in Healthcare, and/or (ii) addressing ethical, trust and governance challenges associated with the deployment of AI/ML technologies across various domains.

Research keywords: AI and ML in Healthcare (Medical Imaging, Image Analysis, Disease Prediction and Diagnosis), AI Governance, Data Governance, Data Value, Trustworthy AI (Data and AI bias, Fairness, Explainable AI), AI Ethics, Responsible AI



Dr Maria Grazia Porcedda

Trinity College Dublin

Dr [Maria Grazia Porcedda](#) is Assistant Professor in Information Technology Law at the School of Law, Trinity College Dublin. She specialises in the relationship between law and technology with specific expertise on privacy, data protection, cybersecurity, cybercrime and surveillance in EU law. Maria Grazia has an interdisciplinary background in Law and Political Science reflected in her socio-legal and interdisciplinary research. Her work has appeared in leading European law and technology and computer science outlets. She is the author of the monograph 'Cybersecurity, Privacy and Data Protection in EU Law. A law, policy and technology analysis' (Hart Publishing 2023).

Maria Grazia has broad experience in interdisciplinary collaborative projects funded by the EU framework programme, the EU MSCA and the UKRI. She is the Principal Investigator of the Provost's PhD Projects Award PRECYLI on cybercrime law in Ireland, enhanced by a grant from the Society of Legal Scholars. She is a member of the EDPB's Support Pool of Experts and of Horizon Europe VIGILANT's Advisory Board.

Maria Grazia has been a visiting scholar at Universitat Pompeu Fabra (Barcelona) and at Tilburg University's TILT institute. Prior to joining TCD, Maria Grazia held posts at the School of Law at the University of Leeds, the Robert Schuman Centre for Advanced Studies (Florence), the Department of Law of the European University Institute (Florence), and CRIDS (Namur).

Maria Grazia holds a PhD in Law from the European University Institute, where she also earned her LLM. She trained at the European Data Protection Supervisor, the Organisation for Economic Cooperation and Development and the Embassy of Italy at Washington D.C. Maria Grazia holds degrees in International Relations and Political Science from the University of Bologna and its Collegio Superiore and the University of Cagliari. She spent periods of study at UC Berkley, John Hopkin's SAIS, ENS-Lyon and Nottingham Trent University. She was the recipient of the 2011 Ruffini Prize of the Italian Lyncean Academy.

For this call, Dr Porcedda is interested in projects in the area of EU and comparative cybersecurity law, EU and comparative cybercrime law, information technology law and governance, cyber sovereignty, privacy and data protection law, privacy and data protection engineering, artificial intelligence and electronic surveillance. Interdisciplinary projects are welcome.

Research keywords: AI, Cybersecurity, Cybercrime, Cyber Sovereignty, 'by Design', Data Protection, Law and Information Technology, Privacy, Privacy Engineering, Surveillance



Dr Marguerite Barry

University College Dublin

Dr [Marguerite Barry](#) is Associate Professor and Head of School at the School of Information & Communication Studies in University College Dublin. She is a funded investigator with ADAPT and Programme Director of the Erasmus Mundus MSc in Transition Innovation and Sustainability Environments (TISE) and a member of the Centre for Digital Policy at UCD. Her research is based in human-computer interaction (HCI) and digital and critical media studies and focuses on ethics in digital technologies – specifically in developing theory and tools for supporting

ethical reflection in design and development as well as methods to support ethical interventions, working with a variety of different stakeholder groups including researchers, practitioners, artists, civil society and public community groups.

Recent academic publications have explored ethical design for technologies to support well-being, the social expectations and public communication of 'ethical' AI, algorithmic vulnerability and co-creation methods and environments for ethical intervention. Her work is published in ACM SIGCHI conferences and key journals in the fields of digital media, human computer interaction and critical data studies in social sciences.

For this call, Dr Barry is looking for projects focused on ethical design and development in digital technology and in automated systems more broadly, creative methods for supporting ethics, as well as research on design and use of digital and automated technologies in public services.

Research keywords: Ethics; Digital Ethics; Information Ethics; Applied Ethics; Critical Data studies; Human Computer Interaction; Human Data Interaction; AI Ethics; Ethics Research Methods; Digital Policy and AI Governance; Co-creation and Participatory methods; Critical media art practice



Prof Mark Little

Trinity College Dublin

Prof [Mark Little](#) is Professor of Nephrology in Trinity College Dublin and consultant nephrologist in Tallaght and Beaumont Hospitals. His research interests include novel model systems for investigating the pathogenesis of ANCA vasculitis, biomarker development and application of data science techniques to study autoimmunity. He leads the HELICAL, PARADISE and FAIRVASC EU consortia, which seek to apply novel data science and linkage techniques to health data. He has published over 140 peer-reviewed manuscripts and was awarded the President of Ireland

Young Researcher Award in 2012. He is a co-founder and autoimmune lead of ERN-RITA, the rare immune disorders European Reference Network, lead of the European Vasculitis Society Registry initiative, chair of the RITA-Ireland Vasculitis Network and co-founder of UKIVAS, the vasculitis society of UK and Ireland. He established the ADAPT Health Working Group, a transdisciplinary forum for digital health.

For this call, Prof Little is interested in projects related to the predictive algorithm development in autoimmune disease, novel means of modelling irregular time series health data through time, visualisation of patient timelines

Research keywords: Autoimmune Disease, Trusted Research Environments, Time Dependent Predictive Modelling, Health and Research Data Integration, Synthetic Dataset Generation, Neutrophils, Monocytes, Cell Culture, Systems Biology



Dr Niall Murray

Technological University of the Shannon

Dr [Niall Murray](#) (Member, IEEE) is a Senior Lecturer with the Faculty of Engineering and Informatics, Technological University of the Shannon (Athlone Campus), Ireland. He is also the Founder, in 2014, and the Principal Investigator (PI) in the Human Centric and Intelligent Digital Media Systems Research Centre (formerly tIIMEx) in TUS. He is a Science Foundation Ireland (SFI) Funded Investigator (FI) with the SFI Adapt Centre for AI enabled Digital Content and an FI with the Confirm Centre for Smart manufacturing. He is an Associate PI with the Enterprise Ireland Funded Technology Gateway COMAND. His current research interests include immersive and multisensory multimedia communication and applications, multimedia signal processing, quality of experience, and wearable sensor systems (further information available at: www.niall-murray.info). He is coordinator of the Horizon Europe TRANSMIXR project (<https://www.transmixr.eu/>).

For this call, Dr Niall Murray is looking for projects across the XR pipeline, from creation, to delivery, to consumption. I am particularly interested in projects in the creative & cultural sector or health sector (neurodiverse (ADHD, ASD) related projects)

Research keywords: eXtended Reality, Human Centric AI, Health, Education, Cultural and Creative Sectors, Intelligence on limited devices, Volumetric Video, Physiological Signal Processing, Interaction, AI enhanced Multimedia Content



Prof Naomi Harte

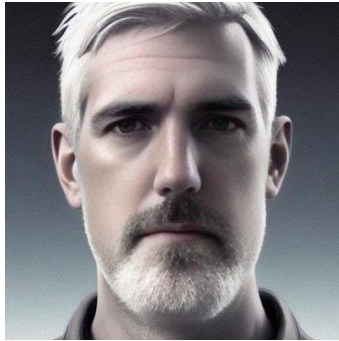
Trinity College Dublin

Prof [Naomi Harte](#) is Professor in Speech Technology in the School of Engineering in Trinity College. She is Co-PI and a founding member of the ADAPT SFI Centre. In ADAPT, she has led a major Research Theme centered on Multimodal Interaction involving researchers from Universities across Ireland and was instrumental in developing the future vision for the Centre for 2021-2026. She is also a lead academic in the hugely successful Sigmedia Research Group in the School of Engineering. She was appointed as an SFI Engineering Lecturer in TCD in 2008 (Stokes Programme). Prior to returning to academia, Naomi worked in high-tech start-ups in the field of DSP Systems Development, including her own company. She also previously worked at McMaster University in Canada. She was a Visiting Professor at ICSI in 2015, and became a Fellow of TCD in 2017. She earned a Google Faculty Award in 2018 and was shortlisted for the AI Ireland Awards in 2019. She currently serves on the Editorial Board of Computer Speech and Language and was General Chair of INTERSPEECH 2023 in Dublin.

Naomi's research centres around Human Speech Communication. She considers speech as something we both hear and see, with a strong multimodal aspect to her work. Her research involves the design and application of mathematical algorithms to enhance or augment speech communication between humans and technology. Much of that work is underpinned by signal processing and machine learning, but also requires an understanding of how humans interact. Her current research projects include audio-visual speech recognition, speech synthesis evaluation, multimodal speech analysis, and birdsong. Her industrial background brings a real-world approach to her research.

For this call, Prof Naomi Harte is particularly interested in projects related to speech synthesis evaluation. She values an interdisciplinary team and is open to team members who are engineers, computer scientists, linguists, psychologists or from other disciplines. They just have to identify complementary research on this topic, or another of their suggestions.

Research keywords: Speech, Speech Communication, Speech Synthesis, Human Interaction, Multimodal Speech Analysis, Deep Learning, Machine Learning, Speech Signal Processing, Audio-Visual Speech Recognition, Turn-Taking, Multiparty Interaction.



Dr P.J. Wall

TU Dublin

Dr [P.J. Wall](#) is Adjunct Assistant Professor in Trinity College Dublin (TCD) and a Lecturer at Technological University Dublin. He has been a member of ADAPT for many years, and has previously held the positions of Research Fellow and Teaching Fellow with the School of Computer Science & Statistics in TCD. Dr Wall holds various visiting Professor and teaching positions including with the University of Manchester (UK) and the Indian

Institute of Technology Jodhpur (India). He also teaches and collaborates with various other institutions such as Yale University, Makerere University (Uganda), Addis Ababa University (Ethiopia), World Vision Ireland, Concern Worldwide, and Google.

Dr Wall teaches on the use of technology for global development (ICT4D), technology for global sustainability, and AI ethics. He is currently Principal Investigator for two Science Foundation Ireland (SFI) Discover projects studying the ethical use of technology in school students' lives, and a Higher Education Authority (HEA) funded project on sustainability, technology and ethics. In addition, he leads the "AI, Ethics, and Technology" Special Interest Group in ADAPT, is a member of the steering committee of the DataEthics group in TCD, and is the Founder and Convener of the "Information, Technology, Ethics, and Global Development" working group with the Development Studies Association of Ireland.

He has organised and chaired many international conferences and is currently the Senior Editor of the Electronic Journal of Information Systems in Developing Countries (EJISDC) and an Associate Editor with the Information Technology for Development Journal. He was nominated for the Provost's Excellence in Teaching Award in TCD in 2019 and won the Education & Public Engagement Research Excellence Award with the ADAPT Centre in 2021. He was also awarded the Early Career Academics Award by Yale University in 2016 for his contributions to their Critical Realism Project.

Dr Wall's primary research interests focus on AI and AI ethics – specifically the ethics of leveraging AI and other technologies to address sustainability challenges in different social and cultural contexts in both the Global North and the Global South. Another main focus of Dr Wall's work is digital innovation for healthcare in the Global South and the ethics of using AI and mobile technologies in this context. His PhD work examined mobile and digital health (mHealth) interventions in Sierra Leone, where he explored and theorised the social, cultural, political and ethical aspects of implementing, using and scaling mHealth technologies in low-resource contexts.

For this call, Dr Wall is interested in supervising projects involving:

- Technology and AI for global development (ICT4D) with a specific focus on public healthcare (mHealth) and education in the Global South.
- The ethical use of AI in various social, cultural and political contexts and an examination of the ethical implications of such projects (AI ethics).
- A critical examination of global sustainability and the application of AI and other technologies for addressing sustainability in both the Global North or the Global South.
- Other projects related to data justice, AI ethics, technology ethics, the ethics of Global Development, AI standards, and AI governance.
- Innovative use of research philosophy, theory and methodology – including indigenous theory and philosophical approaches originating from the Global South.

Research keywords: AI, AI ethics, global sustainability, mHealth, Global Development, ICT4D



Prof Rob Brennan

University College Dublin

Asst. Prof [Rob Brennan](#)'s main research interests are AI governance, cybersecurity risk, data protection, knowledge graphs, and data governance. Rob is an Assistant Professor in the School of Computer Science, University College Dublin and a Principal Investigator of the Science Foundation Ireland (SFI) EMPOWER data governance project. He was coordinator of the H2020 Marie Skłodowska-Curie project ELITE-S on ICT standards and the H2020 ALIGNED project on software and data engineering. He was Principal Investigator on the ADAPT-Ordnance

Survey Ireland project publishing Ireland's reference geospatial data as Linked Data on the web and the ARK (Access Risk Knowledge) Virus project with the TCD Centre for Innovative Human Systems (School of Psychology) and St James's Hospital Dublin that built socio-technical systems analysis knowledge graphs for covid infection control. He is the data governance lead of the National Quality and Patient Safety Signals system for Ireland and a research associate of the UCD Centre for Cybersecurity and Cybercrime Investigation.

The long-term focus of this research is to develop web-based knowledge systems that can support human-led governance of complex socio-technical systems based on high quality, trusted, secure and easily shared data. This means taking a systems approach and going beyond point solutions based on analytics while providing actionable insights for tactical, operational and strategic governance of data as an asset.

For this call, Asst. Prof Brennan is interested in projects which seek to improve risk and safety governance in high risk domains like AI, health, cybersecurity and data protection.

Research keywords: Knowledge Graphs, AI Governance, Trustworthy AI, Transparency, Data Governance, Privacy, Data Protection, Data Quality, FAIR Data, Data Value, Human Factors, Socio-Technical Systems Analysis, Regtech, Data Spaces, Human-AI Teams, Open Science.



Dr Ruairí O'Reilly

Munster Technological University

Dr [Ruairi O'Reilly](#) is a lecturer in Computer Science at Munster Technological University (MTU) in Cork, Ireland. His research focuses on integrating automated analytics into workflows requiring expert knowledge. The primary application domain is e-health, combining artificial intelligence, machine learning and distributed systems into scalable clinical workflows. The intent is to contribute an understanding of the inherent limitations of analysis approaches, the data associated with clinical analysis, and the complexity of the multi-stakeholder perspectives required.

For this call, Dr O'Reilly is looking for projects in the areas of systems analysis for workflow-based processes, Open-source AI and FAIR ML. Topics include:

- Open-Source AI-Powered Clinical Workflow Optimisation
- FAIR-Compliant Data Integration Platform for Distributed Clinical Settings
- Distributed Learning Frameworks for Clinical Predictive Analytics
- Open-Source Tools for Assessing and Enhancing the Fairness of AI Models in Clinical Applications
- Interoperable, FAIR-Compliant Clinical Decision Support System

Research keywords: Artificial Intelligence, Data Analytics, Data Representation, Data Visualisation, Knowledge & Data Engineering, Machine Learning, Multimodal Analytics, Distributed Architectures, Real-Time Data Acquisition



Dr Tijana Milosevic

University College Dublin

Dr. [Tijana Milosevic](#) is an Assistant Professor and a fellow at the Centre for Digital Policy at UCD School of Information and Communication Studies (ICS). Her main research topic is human dignity and how this value is produced and lived in everyday life, both digitally and offline. Tijana's main area of study is children and young people's digital media use and how it impacts their wellbeing; as well as exposure to online risks, such as cyberbullying. She has also studied online intermediation

and digital media policy. She regularly engages in online safety-related policy consultations, engages with the media and has provided expert evidence in front of Irish parliamentary committees. Tijana has published over 20 academic articles in interdisciplinary journals such as *New Media & Society*, *Social Media & Society* and *International Journal of Communication*, among others, and she is also the author of "Protecting Children Online: Cyberbullying Policies of Social Media Companies" (MIT Press, 2018). She is currently a member of the Pool of European Youth Researchers, a joint initiative of the Council of Europe and European Commission.

For this call Dr. Tijana Milosevic, is interested in projects in the area of Digital policy (online intermediation, online safety and risks, children's rights, children and young people's digital media use) such as

- Children's digital media use (risks such as cyberbullying, grooming, self-harm, among others; wellbeing, digital skills, literacy and citizenship)
- Online safety and cybersecurity
- Dignity theory
- Privacy
- Artificial intelligence and content moderation
- Children and young people's digital media use and ethics (e.g. use of LLMs)

Research keywords: online safety; online risks; children's rights; cyberbullying; children and young people's digital media use; artificial intelligence and content moderation; dignity; digital citizenship; digital policy; ethics; privacy



Dr Yalemisew Abgaz

Dublin City University

Dr [Yalemisew Abgaz](#) is an assistant professor of Computing at the School of Computing, in the Faculty of Engineering and Computing, at Dublin City University, Ireland. Yalemisew's research interests include semantic modelling (ontology development and evolution, semantic publishing, and search), digital humanities, natural language processing, data literacy and analytics, software engineering, information retrieval, and computational creativity.

Yalemisew has been a funded principal investigator (2019-2021) on the ChIA project affiliated with the Austrian Centre for Digital Humanities at the Austrian Academy of Sciences. ChIA is a digital humanities research project aiming to enhance the access and analysis of cultural data by testing semantic tools and AI technologies on cultural and historical images. Yalemisew has been a senior research fellow in the future software systems architecture project at the Lero Research Centre (2021-2022), a research fellow and postdoctoral researcher at the ADAPT Centre at Dublin City University (2017-2021) affiliated with the Austrian Centre for Digital Humanities at the Austrian Academy of Sciences, and a postdoctoral researcher (2014-2017) at Maynooth University.

For this call, Dr Abgaz is interested in supervising projects related to semantic web technologies, digital humanities, natural language processing, ontology engineering, knowledge graph generation, and the application of large language models for monolith Software Decomposition.

Research keywords: semantic web technologies, digital humanities, natural language processing, ontology engineering, knowledge graph generation, semantic annotation, cultural heritage image processing, artificial intelligence, lexical resources.



Prof Yvette Graham

Trinity College Dublin

Prof [Yvette Graham](#) is Assistant Professor in AI and Strand Lead in the ADAPT research centre at Trinity College Dublin. Her work includes development of systems for a wide range of AI/NLP tasks, including Machine Translation, Dialogue Systems, Sentiment Analysis, Video Captioning, and Lifelog Retrieval. Besides NLP systems, Dr. Graham is also widely known for her work on NLP evaluation that has revealed misconceptions and bias in system evaluations and has been adopted by high profile competitions including the Conference on Machine

Translation and NIST TRECvid. She has published upwards of 100 papers in venues such as EMNLP, ACL and JNLE, and was previously awarded best paper at the Annual Conference for the Association of Computational Linguistics in 2015, and served on numerous program committees including Program Chair for EACL 2024.

For this call, Dr Graham is interested in supervising projects in the area of Natural Language Processing / Artificial Intelligence

Research keywords: Dialogue, Large Language Models, Natural Language Processing Evaluation, Artificial Intelligence