

Post Title: PhD Studentship in Data Governance

Anticipated Start Date: 01 September 2021

Closing Date: 25 June 2021

Apply: <https://forms.gle/H3o6p8UPK41jRfix6>

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 40 competitive EU research projects and obtained €18.5 million in non-exchequer non-commercial funding. Additionally, six 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.

As an ADAPT funded PhD researcher you will have access to a network of 85 global experts and over 250 staff as well as a wide multi-disciplinary ecosystem across 8 leading Irish universities. We can influence and inform your work, share our networks and collaborate with you to increase your impact, and accelerate your career opportunities. Specifically we offer:

1. Opportunity to build your profile at international conferences and global events.
2. A solid career pathway through formalised training & development, expert one-on-one supervision and exposure to top specialists.
3. A Fully funded, 4 year PhD postgraduate studentship which includes a stipend of (€18,500 per annum - non taxed), along with equipment, annual travel funding
4. Funding for annual student fees

Research project/Challenge

The aim of this PhD is to explore challenges related to data governance methods/techniques and develop a data value maturity assessment that will avail of a range of techniques balancing data value and minimise risks. The rapid acceleration of Data and Artificial Intelligence on all parts of society requires an understanding of the value of data that balances the needs and values of individuals, organisations and society.

The PhD will focus on how to measure data value in organisations and data value chains. The student will research how maturity in data value management and data governance can be assessed. The

student will investigate techniques and define appropriate approaches to assess data value considering organisational, process and technical aspects. In this context the investigation will explore how algorithms/techniques can be used to automate the data value assessments and interpretability to generate explanations for the users. Collaborating with companies, the researcher will acquire knowledge in novel data governance practices and how those can be advanced. Equipped with a deep knowledge in data governance in the intersection between business and computing, the researcher will be well positioned to embark on a career either in industry or academia.

Minimum qualifications:

- Applicants must have a recognised primary degree which is considered equivalent to Irish university primary degree level.
- Applicants normally require a Masters Degree (Honours) or strong Honours undergraduate degree in Informatics, Computer Science, Information Systems, Information Management or related degree. Applications should have achieved high marks in their undergraduate degree. This is typically a first-class honours, although outstanding students with a second class honours primary degree that can demonstrate strong achievements related to the research work can also be considered.
- Minimum English language requirements (IELTS: 6.5 minimum overall score, TOEFL (Paper based test): 585, TOEFL (Internet based test): 95, PTE (Pearson): 62). For further details see: <https://www.maynoothuniversity.ie/study-maynooth/postgraduate-studies/phd-research-programmes>

Preferred qualifications:

- Excellent communication, teamwork and organizational skills.
- Strong data management, analytical skills and problem-solving skills
- Aptitude for technology and working with companies/organisations
- Experience of the research process (at least an undergraduate level)
- Must be eager to work in and learn from a multi-disciplinary multi-organisation team
- Demonstrated knowledge in data governance approaches and data/architectural modelling
- Experience with communicating research and/or science to a lay audience

Application Process

Each application should only consist of

- 1) A letter of introduction and motivation (max 1500 words). In the letter, applicants should include the following details:
 - i. An explanation of your interest in the research topic and why you believe you are a suitable candidate for the position.
 - ii. Motivation, indicating why you wish to conduct this research project offered by ADAPT, and why you expect that you will be able to complete the research successfully.
 - iii. Details of your final year undergraduate project (if applicable)

- iv. Details of your MSc project / research experience (if applicable)
 - v. Details of any relevant modules previously taken, at undergraduate and/or Master level.
- 2) CV: Detailed curriculum vitae, including – if applicable – relevant publications
 - 3) Transcripts of degrees
 - 4) The name and email contacts of two academic referees
 - 5) Details of any relevant work experience (if applicable).

Informal enquiries about this position can be made via email to Prof Markus Helfert (markus.helfert@mu.ie) referencing 'PhD_DataGov' in the subject line

Diversity

ADAPT is committed to achieving better diversity and gender representation at all levels of the organisation, across leadership, academic, operations, research staff and studentship levels. ADAPT is committed to the continued development of employment policies, procedures and practices that promote gender equality. On that basis we encourage and welcome talented people from all backgrounds to join ADAPT.

About the ADAPT Centre

ADAPT is the world-leading SFI research centre for AI Driven Digital Content Technology hosted by Trinity College Dublin. ADAPT's partner institutions include Dublin City University, University College Dublin, Technological University Dublin, Maynooth University, Munster Technological University, Athlone Institute of Technology, and the National University of Ireland Galway. ADAPT's research vision is to pioneer new forms of proactive, scalable, and integrated AI-driven Digital Content 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.

Our Research Vision

Governments and civil society are starting to recognise the need for urgent and concerted action to address the societal impact of the accelerating pace of digital content technologies and the AI techniques that underpin them. ADAPT provides an ambitious, ground-breaking, integrated research programme that assembles three interlocking Strands that together are capable of addressing this challenge. Each of these complementary and reinforcing research Strands takes one of the different perspectives on the provision of personalised, immersive, multimodal digital engagement, i.e. the individual's experience and control of the engagement, the algorithms underlying digital content processing, and the balanced governance by enterprise and societal stakeholders.

Digitally Enhanced Engagement Strand

From the individual perspective, research within this Strand will deliver proactive agency techniques that sense, understand and proactively serve the needs of individual users to deliver relevant, contextualised and immersive multimodal experiences which also offer them meaningful control over the machine agency delivering those experiences.

Digital Content Transformation Strand

From the algorithmic perspective, new machine learning techniques will both enable more users to engage meaningfully with the increasing volumes of content globally in a more measurably effective manner, while ensuring the widest linguistic and cultural inclusion. It will enhance effective, robust integrated machine learning algorithms needed to provide multimodal content experiences with new levels of accuracy, multilingualism and explainability.

Transparent Digital Governance Strand

From the enterprise and societal perspective, new structured knowledge frameworks and associated practices for AI data governance will be required to balance the needs and values of individuals, organisations and society when it comes to rich digital experiences. This requires the advancement of research in the areas of data ethics, data quality, data protection, data value, data integration, and multi-stakeholder governance models.