



Job Description

Job Title: Computer Science Graduate for Developer Role

School / Department: ADAPT Centre (Contenseo)
Location: Trinity College Dublin

Supervisor: Aidan Murray

Duration: 5 month contract with potential for full-time, equity role.

Role overview

As a full stack developer at Contenseo, you will be an integral part of our dynamic team based in the prestigious Adapt Centre at Trinity College. You'll have the opportunity to work on our groundbreaking content licensing system, utilising your expertise in to enhance copyright protection and streamline the licensing process.

We require a solutions-focussed person that can deliver a high-valuable impact to the project through the implementation of technical solutions to the project goals, in particular to further develop the 'Licence Finder', to assist those who licence (buy) content and those who licence (sell) content online. Currently licensing content remains a very fragmented, form-heavy and human-centric user experience (UX). The project aims to develop a system-which will have the following innovative features: A content licensing 'digital agent' will increase efficiency, reduce costs, and generate extra revenues by automating and streamlining the process of identifying, tracking, and licensing copyrighted content. Such an agent will offer several competitive advantages and value propositions, as it will automate the process and remove many touch points that currently require a person's attention.

Key responsibilities:

- Collaborate with cross-functional teams to develop algorithms for enhancing content licensing and copyright protection.
- Design and conduct experiments to evaluate system performance and iterate on improvements.
- Contribute novel ideas to solve complex challenges in content licensing and copyright enforcement.
- Stay up-to-date with the latest advancements in machine learning research and apply them to our projects.

Essential and Desirable Skills:

- Excellent verbal and written communication is a must. Very collaborative team environment
- 2. Javascript (React)
- 3. Java (Spring)





- 4. API design knowledge and experience
- 5. UI experience and design skills
- 6. Web application development
- 7. Full stack experience a plus. Role is both front end but having back end skills would help
- 8. CSS (advanced, Sass, less etc)
- 9. Good working knowledge of networking would be an advantage but not essential
- 10. Good working knowledge of RDBMS and NoSQL technologies also an advantage
- 11. Experience with Azure or AWS

Why ADAPT and Contenseo?

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 modelling, 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 employee you will have access to a network of 85 global experts and over 250 staff as well as a wide multi-disciplinary ecosystem across eight 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:

- Exposure and free access within a multi-disciplinary ecosystem across 8 leading Irish universities
- Opportunity to build your profile at international conferences and global events
- Fast-track your career through formalised training & development, expert one-onone supervision and exposure to top AI specialists

Benefits

- Competitive salary
- Flexible working arrangements
- Employee Assistance Programme
- Computer and peripherals of your choice
- Sports Facilities
- A fast-paced environment with impactful work
- 22 days of Annual Leave
- Pension





- Paid Sick Leave
- Day Nursery
- Training & Development
- Travel Pass Scheme
- Staff Discounts

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, coordinated by Trinity College Dublin and based within Dublin City University, University College Dublin, Technological University Dublin, Maynooth University, Munster Technological University, Technological University of the Shannon, and the University of 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.