

Post Title: Software engineer

Salary Scale: €50,805 - €56,764 Negotiable depending on experience and expertise in a similar software engineer role from Postdoctoral Level 1 Point 6 to Postdoctoral Level 2 Point 4 on the IUA scale.

Location: Trinity college Dublin

Reports to: Principal Investigator Dr. Esther Murphy

Closing Date: 16 July 2014, 12pm

Duration of post : Immediate start til 31st December 2024 (with strong potential for contract renewal)

Apply: Please email your application (cover letter & CV) to digi-id@tcd.ie. Please see below for details on how to apply.

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 software engineer 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:

- 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-on-one supervision and exposure to top AI specialists

Digi-ID PLUS: Empowering Digital Inclusion for People with Intellectual Disabilities and Autism

Overview

Digi-ID PLUS is a Pan-European interdisciplinary research and innovation program dedicated to tackling the challenge of digital inclusion among individuals with intellectual disabilities (ID) and autism. This initiative is spearheaded by Dr. Esther Murphy recipient of Trinity College Dublin Provost Innovation award for Social Impact and academic collaborator at the Adapt centre from the School of Engineering and involves collaboration with global tech giant Microsoft, various health and education NGOs, and government bodies. DigiAcademy is an inclusive digital skills education platform co-created with people with intellectual disabilities (ID) to deliver valuable, accessible content. It allows learners to set their own learning plans and adjust the pace of video content. The platform supports technology use to enhance quality of life and create accessible employment for individuals with ID. Involving professionals from various fields across Europe, DigiAcademy is the only co-designed solution of its kind, with peer trainers who have ID/autism. Its open science approach and international partnerships increases its broad reach and potential for global expansion. Check out our website for more details: [Digi Academy - Home Page \(digi-academy.org\)](https://digi-academy.org)

Mission

Our mission is to empower people with intellectual disabilities (ID) and autism to manage their health and social inclusion needs digitally, ensuring they are not left behind in the digital age. Central to Digi-ID PLUS is a co-design methodology and an inclusive employment strategy. We have established paid citizen advisory panels to ensure accessibility and inclusivity, consulting and validating all key program design and content decisions together. These panels support co-design, user testing activities, and present our research and innovation findings at international, EU, and national conferences.

Achievements

To date, we have engaged in co-creation and co-design activities with over 500 citizens with intellectual disabilities (ID) and their support circles. This collaboration has led to the development of our award-winning accessible digital skills platform, DigiAcademy, and our accessible digital skills education video platform. Our efforts have positively impacted individuals within the intellectual disability community, resulting in us receiving significant awards. Notably, we have been honored with the European Commission Award for Inclusion in Digital Skills and an honorary mention at the European Citizen Science Award.

Future Opportunities

Joining our mission offers the chance to contribute and learn how best to design and deliver high-quality solutions for digital inclusion. This rapidly growing area of research and innovation presents multiple career pathways, including:

UI and UX Design: Crafting user interfaces and experiences that are accessible and user-friendly for people with intellectual disabilities (ID) and autism.

Accessible Design: Developing design strategies and tools that ensure digital content is accessible to all users.

Adaptive Learning: Innovating new features and tools to enhance learning experiences for individuals with different abilities.

For more details on the team : <https://www.adaptcentre.ie/news-and-events/inspireinclusion-within-adapt-meet-digiacademy/> Additionally, please find our social media handles below:

LinkedIn: [DigiAcademy Technology | LinkedIn](#)

Twitter: [Digi ID \(@JoinDigiAcademy\) / X](#)

DigiAcademy: A TCD Campus Startup

DigiAcademy was founded by Dr. Esther Murphy as a result of the EIT Health-funded Digi-ID PLUS program. It is now running pilot partnerships with the disability and education sectors and has garnered strong international traction. This startup aims to continue expanding its impact and exploring new avenues for research and innovation in digital inclusion. You can find out more about DigiAcademy here <https://www.techcentral.ie/digital-skills-by-the-people-for-the-people/> and [DigiAcademy Project Wins at European Digital Skills Awards 2023 – Irish Computer Society \(ics.ie\)](#)

Digi-ID PLUS represents a significant step towards ensuring that people with intellectual disabilities and autism can fully participate in the digital world. By joining this initiative, individuals and organizations can make a meaningful difference in the lives of many, while also exploring innovative career paths in a burgeoning field.

Funding Information

This project is funded by EIT Health, who are a network of health innovators backed by the European Union. Their aim is to enable European citizens to live longer, healthier lives by promoting innovation. As Europeans tackle the challenges of increasing chronic diseases and multi-morbidity, they seek to realise technology's potential to move beyond conventional approaches to treatment, prevention, and healthy lifestyles. To succeed, Europe needs thought leaders, innovators, and efficient ways to bring innovative healthcare solutions to market. EIT Health addresses these needs. They connect all relevant healthcare players across European borders – making sure to include all sides of the “knowledge triangle” of business, research and technology, and education, so that innovation can happen at the intersection of research, education, and business for the benefit of citizens.

This project has also received funding from Enterprise Ireland. Enterprise Ireland is the government organization responsible for the development and growth of Irish enterprises in world markets. They provide funding and support for innovative projects that have the potential to contribute to the economy and society.

About Trinity:

Trinity is Ireland's leading university and is ranked 87th in the world (QS World University Rankings 2025). Founded in 1592, the University is steeped in history with a reputation for excellence in education, research, and innovation, which has been inspiring generations of thinkers for over 400 years. Trinity College Dublin- an introduction

At Trinity, we are committed to equality, diversity, and inclusion. Trinity welcomes applications from all individuals, including those applicants with disabilities, those who may have had non-traditional career paths, those who have taken time out for reasons including family or caring responsibilities. We also welcome international applicants including those whom have been displaced due to war.

Trinity College Dublin is Ireland's premier University. We are an EU Sustainable Gender Equality Champion and we hold an Athena Swan Silver award, recognising our ongoing work to advance gender equality both within Trinity and in the Higher Education sector. Trinity is committed to supporting work-life balance and to creating a family-friendly working environment.

About the role

The position is for a Lead Full stack Developer and includes the following responsibilities:

- Develop new features and enhancements of existing feature in DigiAcademy platform.
- Prioritize and work on new features and enhancements from the product backlog.
- Work on technical maintenance and bug fixing
- Providing technical documentation for all the new changes made to the platform.
- Ongoing technical support to the project partners - available during working hours.
- An agile development process will be followed and will incorporate ongoing testing with and feedback from users with ID (Citizen Advisory Panel)
- Have a high-valuable impact to the project through the **co design of accessible education** on a range of mainstream technology topics aligned results from first phase work findings.
- Join an established team of experts in the fields of accessibility, engineering, intellectual disability, speech and language therapy to contribute to **coordinating user testing sessions** with established networks and within the Citizen Advisory Panel scheduled monthly meetings.
- Assist with **organisation and facilitation** of co design and user testing activities.

- Assist in **organising and co-ordinating programme dissemination activities** and contribute to academic peer review publications and community events.
- Enhance your reputation through publishing in top-quality journals and conferences in collaboration with team members.
- ADAPT's Research Development Team will help you develop your ideas into projects and establish a strong funding track record, in the area of AI public engagement activities.
- Participate alongside leading experts in exciting project activities and events to further citizen science research in AI and adaptive learning and digital inclusion.
- You will have the opportunity to nationally and internationally present and represent the ground-breaking research carried out by you and the research team.
- You will develop as a researcher through access to a wide training & development opportunity.
- You will build a strong network through opportunities to liaise with internal and external stakeholders including industry and academic partners/collaborators.
- Involvement with all aspects of the project lifecycle and follow all project planning procedures as specified by the Principal Investigator to ensure the smooth running and proper scheduling of the project, and the building and maintaining of linkages with key stakeholders.
- Contribute to maintaining and enhancing our award winning online digital skills platform which is making a real-life difference to those with intellectual disabilities. <https://digi-academy.org/home>
- Applicant should have experience with technologies such as HTML, CSS, Javascript, Angular, NodeJs, ExpressJs, Prisma, PostgreSQL, Azure.
- Applicants should have demonstrated ability to apply new skills as we will look to future possibilities to integrate outputs from ADAPT research agenda that pioneers and combines research in AI driven technologies: Natural Language Processing, Video/Text/Image/Speech processing, digital engagement, semantic modeling and personalisation.

Preferred qualifications:

Degree in Computer Science technology or related field.

- Javascript front-end development using Angular
- Javascript back-end development using Express
- Relational databases such as PostgreSQL, MySQL etc.
- Experience building/working on full-stack software projects
- Familiarity with Object Relational Modelling (ORM) libraries such as Prisma
- Familiarity with event libraries such as RxJS
- Project deployment through Azure and GitHub Actions
- Use of PostgreSQL in previous projects
- Rest API design
- UNIX command line knowledge
- Flex CSS layouts
- VCS, Git, GitHub, etc
- Containerisation Docker
- Accessible web design/W3C standards
- Unit Tests, Integration Testing, End-to-End testing, API testing
- Continuous integration
- Database design
- Experience in Accessibility and (Digital) Inclusion a significant advantage

- Excellent organisational and task management skills together with the ability to work on several tasks simultaneously.

- Have the ability to prioritize tasks and meet deadlines; be capable of working on own initiative and work under time constraints.

- Ability to work effectively independently and as part of a team – tolerant, cordial and willing to help others, shares work and information; establish rapport with others.

Benefits

- Competitive salary
- Flexible working arrangements
- Computer and peripherals of your choice
- A fast-paced environment with impactful work
- Pension
- Day Nursery
- Travel Pass Scheme
- Bike to Work Scheme
- Employee Assistance Programme
- Sports Facilities
- 22 days of Annual Leave
- Paid Sick Leave
- Training & Development
- Staff Discounts

Application Process

Interested candidates can send their application directly to digi-id@tcd.ie. Applications must include:

- Cover Letter
 - A personal letter of motivation, indicating why you wish to work on this digital inclusion and accessibility project at ADAPT.
 - Must be Arial Font size 12 and no more than ¾ page.
- CV
 - Detailed curriculum vitae.
 - The name and email contacts of two referees

Informal enquiries about the role can also be sent to digi-id@tcd.ie.

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, 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.