Post Title: Front End Engineer
Post Duration: 6 months (€48,626-60,814 per annum depending on experience)
Salary Scale: Up to level 3 point 4 on the IUA SALARY SCALE
Apply: https://forms.gle/E3SM7Cx1VWrvgeXl7

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 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:

- 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
About the role
The Front End Engineer’s role is to develop with the help of the UX designer a slick and useful user interface that demonstrates visual recipes to trail partners. Guidance, wireframes and high-fidelity prototypes will be produced by the UX designer and provided to the Front End Engineer to produce demonstrators based on the API/webservices (exposed by the full stack developer). Many different visual incarnations will be presented in a responsive way in a browser, tablet or on a mobile phone.

The Front End Engineer will require a deep understanding of AWS cloud services (that use APIs), user account setups, multiple front end interfaces on heterogeneous devices, Agile and test-driven development methodologies. The ability to provide users with a searchable set of recipes with slidable touch and motion based interfaces will provide the best possible experience to the users.

Context
The purpose of this position is to produce research based engineering solutions to natural language processing problems for the UniCOOK product to produce a clear pathway to market. The goal is to produce a mixture of NLP techniques that best provide sentence and document level entity recognition and provide the pathways to produce corresponding links to images (representing the text). The Front End Engineer will work with a research engineer, full stack developer, UX designer, commercial lead and the principal investigator on the project to produce a working prototype of the UniCOOK product that will satisfy the requirements of the trail partners and define a base product that will eventually result in an incubation startup if successful.

The provisioning of different user views for dyslexic, non-readers, visually impaired, eco-friendly conscious is key to UniCOOK transitioning to being a successful startup company. Our goal is to build a cohesive team that will push this project towards incubation.

Informal inquiries may be emailed to eamonn.kenny@adaptcentre.ie

Minimum qualifications:
A suitable candidate will have a BSc in Data science or related computer science discipline and a minimum of 5 years research/ industrial.

Main duties and responsibilities:

- Research
  - Assist the PI, Commercial lead, Research Engineer and Full Stack Developer in connecting the researched machine learning techniques to front end outputs
  - Produce a working prototype of the UniCOOK product that will satisfy the requirements of the trail partners and define a base product

- Technical
  - Build a slick UI for multiple devices in a responsive way
○ Build demos of the product using different visual incarnations in a browser, tablet or on a mobile phone
○ Develop with the help of the UX designer a slick and useful user interface that demonstrates visual recipes
○ Work with the UX Designer & Full Stack Developer to produce demonstrators based on the API/webservices (exposed by the full stack developer)
○ Define ways to make recipes searchable
○ Define a way to present directed graph methodologies and images as clickable, slidable visual aids for learning.
○ Set up multiple user accounts with personalisation

Experience
- Minimum 5 years industrial experience (essential)
- Experience working on multiple projects (possibly at the same time) (essential)
- Experience in exposing RestFUL web-services (essential)
- Experience in user modelling and personalisation systems (essential)
- Experience in deep-nets and or machine learning (desirable)
- Artistic background (desirable)

Skills
- A deep understanding of AWS cloud services (that use APIs), user account setups, multiple front end interfaces on heterogeneous devices, Agile and test-driven development methodologies
- Ability to work on own initiative and as part of a team
- Ability to speak in laypersons English on calls speaking to image database providers, publishers and grocery retailers in a way that makes the technology digestible
- Excellent communication and interpersonal skills both written and verbal
- Proven ability to prioritise workload and work to exacting deadlines
- Flexible and adaptable in responding to stakeholder needs
- Enthusiastic and structured approach to research and development
- Excellent problem-solving abilities
- Desire to learn about new products, technologies and keep abreast of new product technical and research developments

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

Please submit the following via our online application form:
https://forms.gle/E3SM7Cx1VWrvgeXi7

- Cover Letter
- Resume: Detailed curriculum vitae, including education, previous experience and previous project work. Please address all skills that you have that match the required experience list above.

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.