Become involved in a pioneering European digital health research initiative, contributing from architectural design to practical implementation

Post Title: Senior Software Architect / Developer for Android / React on a pioneering research project
Post Duration: 30th November 2025
Salary Scale: €61,318 - €66,815
Location: ADAPT Centre, Trinity College Dublin
Reports to: Chief Technology Officer

We are seeking an experienced, skilled, and motivated Senior Software Developer to join our dynamic technical team within a larger green field project team focused on health research. As a key member of a small collaborative group, you will play a crucial role in developing a multi-faceted, production-grade health research software system. This system aims to contribute to the advancement of research in ALS and serve as a blueprint for future projects addressing various diseases. Your responsibilities in this role include offering assistance, support, and mentorship to fellow team members, fostering a positive and collaborative work environment. Additionally, you will be instrumental in designing and implementing processes to optimize operations and boost overall productivity.

Join our team at Precision ALS, a groundbreaking program that unites Clinicians, Computer Scientists, Information Engineers, Technologists, and Data Scientists in a collaborative effort. As a Precision ALS Software Developer, you will be an integral part of a green field project that aims to revolutionize clinical research in ALS across Europe. This unique initiative provides an innovative and interactive platform leveraging artificial intelligence (AI) to analyse extensive datasets, contributing to advancements in precision medicine.

About the role

Software Development Lifecycle:
● Execute the full software development life cycle within an agile team environment.
● Iteratively gather requirements from users and stakeholders, ensuring a deep understanding of their needs.
● Collaborate with team members to prioritise requirements and plan development sprints.

Coding and Testing:
● Develop high-quality, efficient, and flexible code using a variety of modern languages, technologies, and frameworks.
● Implement automated testing to maintain code integrity and catch issues early in the development process.

Deployment Strategies:
● Prepare for system deployment using modern approaches, including VM and container-based solutions.
● Ensure deployment strategies are compatible with both on-premises and cloud environments.

Skills Enhancement:
● Actively engage in challenging, high-impact projects to enhance your development and related skills.
● Take advantage of a wide range of training and development materials to stay updated on the latest industry trends.

Collaboration and Networking:
● Participate alongside leading experts in exciting project activities and events aimed at advancing research in ALS.
● Contribute to the development of a precision medicine-based approach towards new drug development.

Strategic Contribution:
● Play a key role in the creation of a health research software system that serves as a blueprint for addressing various diseases in the future.
• Contribute to the development of precision medicine, aiming for better clinical outcomes and reduced economic costs associated with diseases.

Diverse Work Environment:
• Benefit from a diverse and high-calibre network within our organization, including connections to Trinity College and other prestigious institutions.
• Embrace a work environment that encourages polymathic interests, allowing you to explore and contribute to various areas within the company.

Desirable Skills

Programming Paradigms:
• Experience in a mix of Object-Oriented Programming (OOP) and Functional Programming (FP) paradigms.

Full Stack Development:
• Full-stack development and engineering experience, including:
  o Front-end development with a focus on design and optimizing user experience.
  o Familiarity with Kotlin and modern Android development.
  o Proficiency in React or similar web frameworks.
  o Back-end REST-style API development, ideally in Kotlin or Java.

Scalable Storage Technologies:
• Knowledge of scalable file/object storage technologies such as ZFS, S3, CEPH, and similar data lake approaches.

Data Modelling:
• Experience in modelling complex heterogeneous datasets for structured storage within relational databases (e.g., Postgres, MySQL/MariaDB) and/or non-relational (NoSQL) databases (e.g., Mongo, Neo4j).

Information Security:
• Understanding of information security principles, including authentication, authorization, access control, encryption, and key management techniques.

Health Information Standards:
• Knowledge of health information modelling and/or interoperability standards, such as ISO13606, SNOMED CT, ICD11, OpenEHR, or HL7 (2, 3, FHIR).

Supervisory Experience
• Provide guidance and support and mentorship to team members, promoting a positive and collaborative work environment.
• Develop and implement processes to streamline operations and improve overall productivity.

Attributes

Initiative-taking:
• Proactively identify opportunities for improvement and take the initiative to implement solutions.

Ability to Learn Quickly:
• Demonstrate a keen ability to learn new technologies and adapt to evolving project requirements.

Diligence:
• Exhibit a meticulous attention to detail, ensuring the accuracy and quality of software development.

Collaboration:
• Work effectively as part of a collaborative, multidisciplinary team, contributing ideas and expertise.

Strong Communicator:
• Communicate complex technical concepts clearly and concisely to both technical and non-technical stakeholders.

Adaptability:
• Easily adapt to changing requirements, embracing new challenges and approaches.
Salary & benefits

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- 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

Minimum qualifications

- Bachelor’s degree in computer science
- Proven experience in software development with a focus on innovative projects. 5+ years
- Strong collaboration and communication skills to work effectively within a multidisciplinary team.
- Eagerness to contribute to a first-in-kind project that addresses precision medicine challenges in healthcare research.

Application Process

Join our dynamic team at Precision ALS and contribute your skills to a project that is pushing the boundaries of healthcare research and precision medicine. We encourage you to apply even if you do not fit 100% of the technical requirements. Apply now to be part of this transformative journey.

To assist the selection process, applicants should submit a Curriculum Vitae and a Cover Letter (1x A4 page) before 5pm on the Friday 19th January 2024, that specifically address the following points in their application via the following link: https://forms.gle/VrHXXn2igJFEpr6T9

Applicants Should:

- clearly address this experience and how they obtained their knowledge in their application.
- give examples of how their previous developer experience equips them to deliver the role on Precision ALS.
- Indicate which of the ‘desirable’ areas outlined above are most relevant for them.
- Illustrate, through experience, their ability to work on their own initiative and resolve problems.
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 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 forty-three collaborative research projects, fifty-two licence agreements and oversee sixteen active commercialisation funds and fifty-two commercialisation awards. ADAPT has won forty 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.
- **Develop** skills in a fast-paced environment focused on cutting-edge technology innovation.

As an ADAPT researcher you will have access to a network of eighty-five 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 eight 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.

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.