Post Title: Senior Research Engineer

Beyond 2022 Project at The ADAPT Centre

Post duration: Specific Purpose until 30 September 2022.

Salary Scale: The salary will be on the SFI Experience Postdoctoral Researcher Scale (Level 2B) from €45,942 - €49,049, commensurate with experience.

Closing Date

Monday 14th December 2020.

Position Summary

The Senior Research Engineer is the technological lead for Beyond 2022. This is a multifaceted role offering an exciting leadership position within a national legacy project to mark the Decade of Centenaries.

The successful applicant will work with a team guiding and integrating the development of the core technological components of the Beyond 2022 Project. This requires not just an understanding of the technologies being utilised but also a willingness to question and lead in their integration. The successful candidate will oversee the development and implementation of a variety of components including the maintenance and extension of the project core database, the knowledge graph and NLP pipeline. They will also be expected to understand and integrate the work of our information retrieval specialist.

A key component of the Beyond 2022 is the delivery of a Virtual Reality reconstruction of a destroyed archive. This work is currently underway utilising Adapt engineers and external
agencies. The Research Engineer will be expected to work with these stakeholders to continue the rollout of the Virtual Record Treasury, so an aesthetic sensibility and comprehension of user journeys would be advantageous along with an understanding of UI and UX principles. The candidate will also work with a third part web design agency to ensure the technological and data outputs can be integrated into the website and that these meet the overall public engagement goals of the project. The applicant should be comfortable working with Javascript as the role will involve some front-end programming and styling.

Informal enquiries about this post should be made by e-mail to: Mr Theo Little (theo.little@adaptcentre.ie).

Experience

- Excellent database management skills: NoSQL, Graphing Databases, SQL
- Excellent knowledge of one or more of: Java, PHP, node.js
- Excellent knowledge of scripting languages: Python, PHP, Bash, Perl, JavaScript, d3.js
- Experience with web crawling, data wrangling, data analysis would be a distinct advantage
- Knowledge of web application development and security

Skills

- Excellent written and oral proficiency in English (essential), good communication and interpersonal skills both written and verbal
- Proven aptitude for Programming, System Analysis and Design
- Proven ability to prioritise workload and work to exacting deadlines
- Flexible and adaptable in responding to stakeholder needs
- Experience in releasing code to live production environments
● Strong team player who is able to take responsibility to contribute to the overall success of the team
● 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
● Understanding and appreciation of website and interface design
● Ability to question, sense-check decisions and to lead.

Duties & Responsibilities

● Understand, interpret and communicate software requirements expressed by colleagues, including Historians and Archivists, and deliver solutions which meet expectations.
● Work with external agencies to define requirements, troubleshoot issues and conduct demonstrations.
● Manage and maintain live deployments of Beyond 2022 web services.
● Have the ability to adapt quickly to new technologies as the project continues.
● Work closely with UI and UX designers in the development of web-based applications.
● Implement and develop unit tests of individual software components to ensure functionality and robustness of software applications.
● Document all work to ensure code is easily understood by peers.

Qualifications

Applicants must have a primary degree in Computer Science or a related discipline plus four years relevant experience.
Desirable

Experience in the design and/or delivery of digital humanities projects would also be a distinct advantage.

Benefits

- Competitive salary and equity
- 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

Background to Beyond 2022 Project

June 30th, 2022, marks the centenary of the terrible explosion and fire at the Four Courts, Dublin, which destroyed the Public Record Office of Ireland (PROI) and, with it, seven centuries of Ireland’s collective memories. While incomparable with the loss of human life, the destruction of the Record Treasury at the PROI was one of the great tragedies of the Civil War.

Beyond 2022: Ireland’s Virtual Record Treasury is an exciting all-island and international
research programme to recreate digitally this lost national treasure. Through its innovative and experimental combination of historical research, archival discovery and technical innovation, Beyond 2022 offers a lasting and meaningful legacy from the Decade of Centenaries, democratising access to invaluable records and illuminating seven centuries of Irish history.

The aim of Beyond 2022 is to create and launch on 30 June 2022 a Virtual Record Treasury for Irish history—an open-access, virtual reconstruction of the Record Treasury destroyed at the PROI in 1922. Significantly, the Virtual Record Treasury will also provide an innovative enabling framework for connecting archival collections worldwide and rediscovering our collective national memories.

About the ADAPT Centre Spokes programme

Working at the boundary of research and industry, the ADAPT Centre Spokes programme is an industry-focused programme where teams of researchers and research engineers collaborate with industry partners to work on solutions to industry needs. ADAPT is Ireland’s global centre of excellence for digital content technology. Led by TCD, it combines the expertise of researchers at four universities (Trinity College Dublin, Dublin City University, University College Dublin, Technological University Dublin, Cork Institute of Technology, Athlone Institute of Technology, Maynooth University and National University of Ireland, Galway) with that of its industry partners to produce groundbreaking digital content innovations. ADAPT is seeking talented individuals to join its growing research team. Our research and technologies will continue to help businesses in all sectors and drive back the frontiers of future Web engagement.

You will be working alongside the best and brightest talent in language technologies, content analytics, data analytics, adaptivity, personalisation, interoperability, translation, localisation and information retrieval. The successful candidate will have exposure to all aspects of the
project lifecycle from requirements analysis to design, code, test and face-to-face demonstrations with project stakeholders.

While embedded in Beyond 2022 team you will develop as an engineer, technically and scientifically. In addition, your confidence, leadership skills and communication abilities will be greatly enhanced.

**Background on ADAPT**

The ADAPT Centre, a world-leading SFI Centre, is Ireland’s global centre of excellence for digital content technology funded through Science Foundation Ireland’s Centres programme. ADAPT combines the expertise of over 300 researchers across eight Higher-Education Institutes (Trinity College Dublin, Dublin City University, University College Dublin, Technological University Dublin, Cork institute of Technology, Athlone Institute of Technology, Maynooth University and National University of Ireland, Galway) with that of its industry partners to produce ground-breaking digital content innovations. The ADAPT Centre executive function is co-hosted between Trinity College Dublin and Dublin City University.

ADAPT brings together more than 300 researchers who collectively have won more than €100m in funding and have a strong track record of transferring world-leading research and innovations to more than 140 companies. ADAPT partners are successfully advancing the frontiers of Artificial Intelligence (AI), content analysis, machine translation, personalisation, e-learning/education, media technologies, virtual and augmented reality, and spoken interaction, as well as driving global standards in content technologies.

**Application Information**

In order to assist the selection process, applicants should submit a full Curriculum Vitae and a Cover Letter (1 x A4 page) that specifically addresses how the candidate’s skills and experience align with the criteria set out above.
Please Note:

- Applicants who do not address the application requirements above in their cover letter will not be considered at the short list stage.
- Applicants should note that the interview process for this appointment may include the delivery of a presentation and may include a test of practical skills.

Applicants should submit a full Curriculum Vitae to include the names and contact details of two referees (including email addresses), together with a cover letter (1x A4 page) via the following link: https://apply.adaptcentre.ie/apply.php?jobID=SRE-B2022