<table>
<thead>
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<th>Research Centre</th>
<th>Insight SFI Research Centre for Data Analytics</th>
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<tr>
<td>Post Title</td>
<td>Research Fellow, Data Scientist</td>
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<tr>
<td>Level on Framework:</td>
<td>Level 2</td>
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<tr>
<td>Post Duration</td>
<td>Fixed Term Contract up to 12 months</td>
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**DCU**

Dublin City University (www.dcu.ie) is a research intensive, globally engaged, dynamic institution which has developed its own research specialists, established internationally recognized centres of excellence that have substantive collaborative links with leading universities and industrial partners. DCU is distinguished both by the quality and impact of its graduates and by its focus on the translation of knowledge into societal and economic benefit. Through its mission to transform lives and societies through education, research and innovation DCU acts as an agent of social, cultural and economic progress. DCU is Ireland’s fastest growing university and now hosts more than 17,000 students across its three academic campuses: DCU Glasnevin Campus, DCU St Patrick’s Campus and CU All hallows campus. DCU has a strong track record in attracting both Irish and European Union research funding under Horizon 2020 (and all previous Framework Programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which to advance your academic career.

**The Insight Centre for Data Analytics**

The Insight Centre for Data Analytics (http://www.Insight-centre.org) is an SFI funded Research Centre which brings together researchers from University College Dublin, NUI Galway, University College Cork, and Dublin City University, as well as other partner institutions, Trinity College Dublin (TCD), University of Limerick (UL), National University of Ireland, Maynooth University (MU) and Tyndall National Institute. It creates a critical mass of more than 400 researchers from Ireland’s leading ICT clusters to carry out research on a new generation of data analytics technologies in a number of key application domain areas, such as Health and Human Performance, Smart Communities, Internet of Things, Enterprise and Services and Sustainability and Operations.

The €150m Centre is funded by Science Foundation Ireland and a wide range of industry and European Union partners. Insight’s research focus encompasses a broad range of data analytics technologies from machine learning, decision analytics and social network analysis to linked data, recommender systems and the sensor web. Together, with more than 220 partner companies, Insight researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy.
The Role and Project

The Insight Centre is now recruiting for a Research Fellow in the area of Data Science to join the FinAccAI team working on industry research & development projects funded by Enterprise Ireland through Commercialization Fund Awards.

Principal Duties and Responsibilities

- Lead team in all areas of data analytics
- Design and implement a novel anomaly detection strategy that will highlight unusual patterns from commercial accounting packages.
- Develop an unsupervised learning approach to classifying accounting package datasets.
- Build web based dashboard analytics for the project.
- Implement an API methodology for data integration and data storage.
- To maintain accurate project records and project confidentiality
- Make an international and national contribution to the research field in which he/she is engaged including as an invited speaker at an international conference and through invitation to participate in commercial research.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.

Qualifications, Skills and Experience Required:

Applicants must have a PhD in Engineering, Mathematics or Computer Science. Applicants should have a minimum of 4 years relevant postdoctoral research experience or equivalent at Level 2 of the Research Career Framework.

Previous experience at the level of Research Fellow (or equivalent) is preferred. Computer Science, Engineering or a related discipline with strong software and programming skills and relevant experience in computer vision, deep learning, or collaborative filtering.

Candidates will ideally have;
- Knowledge of one or more of: Java, C++, PHP, node.js, Objective-C, C.
- Knowledge of scripting languages: Python, R
- Experience working with UNIX, Linux, VMWare, Docker, OSX or Windows operating systems.
- Experience of developing web services.
- Database management skills: MySQL, MongoDB, SQL.
- Experience of developing machine learning, especially deep learning based applications.
- Experience in one or more deep learning frameworks, such as PyTorch, Tensorflow, Theano, Keras, Lasagne etc.
- Experience of modern techniques and implementations in computer vision.
- Excellent written and verbal communication and interpersonal skills.
- Proven ability to prioritize workload and work to strict deadlines.
- Ability to work in a team and to take responsibility to contribute to the overall success of the team.
- Strong problem solving abilities.
Experience in the following areas is also desirable:

- Python / Micropython experience.
- Experience working with Mysql or MongoDB
- C programming.
- Lora / LoraWAN familiarity.

Mandatory Training

The post holder will be required to undertake the following mandatory compliance training: Orientation, Health and Safety and Intellectual Property and Data Protection training. Other training may need to be undertaken when required.

Competencies:

**Discipline knowledge and Research skills** – Demonstrates the ability to design and implement part of a programme of research (for example by using critical thinking and the application of relevant research methodologies)

**Understanding the Research Environment** – Demonstrates a thorough understanding of the research environment both nationally and internationally, and the ability to contribute substantially to grant applications.

**Communicating Research** – Demonstrates the ability to communicate their research effectively to the research community and wider society (for example by publishing their research in high quality peer reviewed journals) and the ability to teach and tutor students.

**Managing & Leadership skills** - Successfully manages research projects including the management and supervision of postgraduates and/or junior research staff.