Job Description

College/Management Unit	UCD College of Science
School/Unit	UCD School of Computer Science – CeADAR
Post Title & Subject Area	**EDIH Data Scientist X 2 posts**
Project	**CeADAR Ireland's AI EDIH (CeADAR)**
Post Duration	Temporary 24 months post (initially)
Reports to	Centre Director or nominee
HR Reference No.	016530
HR Administrator	Yasemin Ozdemir

Position Summary

Applications are invited for the positions of EDIH Data Scientists in the newly established European Digital Innovation Hub (EDIH) for AI in Ireland as part of the CeADAR Centre - Ireland's Centre for Applied Artificial Intelligence. CeADAR has been successful in the Europe-wide competitive selection process to be the EDIH for AI in Ireland in addition to its continuing national status.

There are 4 key services that this AI EDIH will provide:

- Test before Invest: these services will include national awareness raising of the positive impacts of AI, AI maturity assessment, demonstration of AI techniques and case studies and knowledge and technology transfer

- Skills and Training: provision of training in AI, boot-camps, apprenticeships, advanced technical courses and courses tailored to business decision makers to better understand the potential of AI

- Support to find Investments: supporting organisations in winning funding through national and EU instruments, and start-ups in securing venture funding.

- Innovation Ecosystem and Networking: The EDIH will act as a broker in bringing together companies/organisations in need of AI solutions with market-ready solution providers. This brokerage will extend nationally and across Europe in concert with the EDIH network when suitable local partners are not available

The EDIH is seeking experienced individuals who have a demonstrated successful track record in data science in industrial research settings (>2 years) or in academic centres. Individuals in this role are expected to have proven experience applying artificial intelligence, machine learning, computational statistics, and statistics to real world problems. The ideal candidate will have a keen interest in contributing to the development of proof of concepts to allow companies to leverage the benefits of state-of-the-art AI algorithms.

Relevant areas of interest include: deep learning, explainable AI, computer vision, privacy preserving machine learning, reinforcement learning, natural language processing, self and semi-supervised learning, and active learning.

Equality, Diversity and Inclusion

UCD is committed to creating an inclusive environment where diversity is celebrated, and everyone is afforded equality of opportunity. To that end the university adheres to a range of equality, diversity and inclusion policies. We encourage applicants to consult those policies here https://www.ucd.ie/equality/ . We welcome applications from everyone, including those who identify with any of the protected characteristics that are set out in our Equality, Diversity and Inclusion policy.

Salary Range: €53,000 - €59,000 per annum

Appointment on the above range will be dependent on qualifications and experience.

Principal Duties and Responsibilities

Technical

- Technical ownership of applied research projects in data science (machine learning) in collaboration with other data scientists and software engineers in the team and companies
- Hands-on research and development activities as required, including devising technical solutions, implementing software and evaluating proposed solutions in the field of data analytics in areas such as computer vision, natural language processing, multimodal time series, etc.
- Continuous learning and application of the latest techniques and libraries in machine learning to real problems
- Dissemination of projects results and evangelisation of technologies at industry events.
- Authorship of technical publications, project reports

Management/Organisational

- Management of research projects with company partners
- Scoping of research projects for industry partners
- Assistance with preparation of funding proposals

Business Development

- Assisting with business development activities when required

Any Other Duties

- Undertake any other duties as assigned by the

Selection Criteria

Selection criteria outline the qualifications, skills, knowledge and/or experience that the successful candidate would need to demonstrate for successful discharge of the responsibilities of the post. Applications will be assessed on the basis of how well candidates satisfy these criteria.

Mandatory

- BSc or MSc in Computer Science or other relevant numerical field.
- Minimum of 2 years' experience developing applied data science (machine learning) solutions.
- Good knowledge of data analytics methods and experience with traditional machine learning and advanced deep learning technologies.
- Experience in one or more of the following areas: deep learning, explainable AI, computer vision, privacy preserving machine learning, reinforcement learning, natural language processing, self and semi- supervised learning, and active learning,
- Strong software development skills using Python and other languages.
- Strong database skills and data pre-processing techniques
- Experience in Linux and in the use of docker containers and API development
- Ability to generate new ideas and build upon existing ideas to generate unique concepts.

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- A willingness to learn and explore new tech and data science tools.
- Experience working closely with industry partners on machine learning projects, particularly developing project specifications and delivering to deadlines on multiple projects simultaneously.
- Excellent communication skills with demonstrated experience of writing technical reports
- Candidates must demonstrate an awareness of equality, diversity and inclusion agenda.

Desirable

- Experience of working in/with industry in a data scientist role.
- Experience in the use of cloud IaaS systems (e.g. AWS, Azure, Google Cloud.
- Experience with JavaScript and Web technologies.

Further Information for Candidates

About CeADAR
CeADAR is funded by Enterprise Ireland and IDA under its Technology Centres programme and is led and driven by a consortium of companies from the data analytics industry, both national and international. It brings together Irish researchers, scientists and engineers in data analytics to address research challenges in the area as identified by SMEs and MNCs operating in Ireland. The research agenda is driven by the requirements of the industry membership.

Supplementary information

The Centre:	https://www.ceadar.ie
The University:	http://www.ucd.ie/aboutucd.htm
UCD College of Science:	http://www.ucd.ie/science/
UCD School of Computer Science:	http://www.csi.ucd.ie/
Enterprise Ireland Technology Centres:	http://www.enterprise-ireland.com/en/Research-Innovation/Companies/Collaborate-with-companies-research-institutes/Technology-Centres.html

Relocation Expenses
X   Will not apply

Garda Vetting Required
X   No.

Informal Enquiries ONLY to:

Name:	Dr Edward McDonnell
Title:	Centre Director
Email address:	Edward.mcdonnell@ucd.ie
Telephone:	N/A

Eligibility to compete and certain restrictions on eligibility

Incentivised Scheme for Early Retirement (ISER):	It is a condition of the Incentivised Scheme for Early Retirement (ISER) as set out in Department of Finance Circular 12/09 that retirees, under that Scheme, are debarred from applying for another position in the same employment or the same sector. Therefore, such retirees may not apply for this position

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Department of Health and Children Circular (7/2010):	The Department of Health Circular 7/2010 dated 1 November 2010 introduced a Targeted Voluntary Early Retirement (VER) Scheme and Voluntary Redundancy Schemes (VRS). It is a condition of the VER scheme that persons availing of the scheme will not be eligible for re-employment in the public health sector or in the wider public service or in a body wholly or mainly funded from public moneys. The same prohibition on re-employment applies under the VRS, except that the prohibition is for a period of 7 years, after which time any re-employment will require the approval of the Minister for Public Expenditure and Reform. People who availed of either of these schemes are not eligible to complete in this competition.
Collective Agreement - Redundancy Payments to Public Servants:	The Department of Public Expenditure and Reform letter dated 28th June 2012 to Personnel Officers introduced, with effect from 1st June 2012, a Collective Agreement which had been reached between the Department of Public Expenditure and Reform and the Public Services Committee of the ICTU in relation to ex-gratia Redundancy Payments to Public Servants. It is a condition of the Collective Agreement that persons availing of the agreement will not be eligible for re-employment in the public service by any public service body (as defined by the Financial Emergency Measures in the Public Interest Acts 2009 – 2011) for a period of 2 years from termination of the employment. Thereafter the consent of the Minister for Public Expenditure and Reform will be required prior to re-employment. People who availed of this scheme and who may be successful in this competition will have to prove their eligibility (expiry of period of non-eligibility) and the Minister's consent will have to be secured prior to employment by any public service body.
Declaration:	Applicants will be required to sign a Pre-Employment Declaration to confirm whether they have previously availed of a public service scheme of incentivised early retirement and/or the collective agreement outlined above. The above represents the main schemes and agreements restricting a candidate's right to be re-employed in the public service. However it is not intended to be an exhaustive list and candidates should declare details of any other exit mechanism they have availed of which restricts their right to be re-employed in the public service. Applicants will also be required to declare any entitlements to a Public Service pension benefit (in payment or preserved) from any other Public Service employment and/or where they have received a payment-in-lieu in respect of service in any Public Service employment.
Superannuation and Retirement:	The successful candidate will be offered the appropriate superannuation terms and conditions as prevailing in the University, at the time of being offered an appointment. In general, and except for candidates who have worked in a pensionable (non-single scheme terms) public service job in the 26 weeks prior to appointment (see paragraph d below), this means being offered an appointment based on membership of the Single Public Service Pension Scheme ("Single Scheme"). Key provisions attaching to membership of the Single Scheme are as follows:

*a. **Pensionable Age*** - The minimum age at which pension is payable is 66 in line with State Pension age changes.

*b. **Retirement Age*** - Scheme members must retire at the age of 70.

*c. **Pension Abatement**:*

●   If the appointee was previously employed in the Civil Service or in the Public Service please note that the Public Service Pensions (Single Scheme and Other Provisions) Act 2012 includes a provision which extends

abatement of pension for all Civil and Public Servants who are re-employed where a Public Service pension is in payment. This provision to apply abatement across the wider public service came into effect on 1 November 2012. This may have pension implications for any person appointed to this position who is currently in receipt of a Civil or Public Service pension or has a preserved Civil or Public Service pension which will come into payment during his/her employment in this position.

- Department of Education and Skills Early Retirement Scheme for Teachers Circular 102/2007

The Department of Education and Skills introduced an Early Retirement Scheme for Teachers. It is a condition of the Early Retirement Scheme that with the exception of the situations set out in paragraphs 10.2 and 10.3 of the relevant circular documentation, and with those exceptions only, if a teacher accepts early retirement under Strands 1, 2 or 3 of this scheme and is subsequently employed in any capacity in any area of the public sector, payment of pension to that person under the scheme will immediately cease. Pension payments will, however, be resumed on the ceasing of such employment or on the person's 60th birthday, whichever is the later, but on resumption, the pension will be based on the person's actual reckonable service as a teacher (i.e. the added years previously granted will not be taken into account in the calculation of the pension payment).

- Ill-Health-Retirement

Please note that where an individual has retired from a Civil/Public Service body on the grounds of ill-health his/her pension from that employment may be subject to review in accordance with the rules of ill-health retirement within the pension scheme of that employment.

d. Prior Public Servant - While the default pension terms, as set out in the preceding paragraphs, consist of Single Scheme membership, this may not apply to certain appointees. Full details of the conditions governing whether or not a public servant is a Single Scheme member are given in the Public Service Pensions (Single Scheme and other Provisions) Act 2012. However the key exception case (in the context of this competition and generally) is that a successful candidate who has worked in a pensionable (non-single scheme terms) capacity in the public service within 26 weeks of taking up appointment, would in general not become a member of the Single Scheme. In this case such a candidate would instead be offered membership of the UCD Pension Scheme. This would mean that the abatement provisions at (c) above would apply, and in addition there are implications in respect of pension accrual as outlined below:

e. Pension Accrual - A 40-year limit on total service that can be counted towards pension where a person has been a member of more than one existing public service pension scheme would apply. This 40-year limit, which is provided for in the Public Service Pensions (Single Scheme and other Provisions) Act 2012 came into effect on 28 July 2012. This may have implications for any appointee who has acquired pension rights in a previous public service employment.

f. Pension-Related Deduction - This appointment is subject to the pension-related deduction in accordance with the Financial Emergency Measure in the Public Interest Act 2009.

For further information in relation to the Single Public Service Pension Scheme for Public Servants please see the following website: http://www.per.gov.ie/pensions.

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