School of Computing

Research Assistant/Associate (Machine Learning)

Grade: F   Vacancy Ref: D82606R2

Main Duties and Responsibilities

1. Leading machine learning research activities within the Northern Cloud Crime Centre

2. Playing a leading role in dissemination of machine learning and cloud-security research and impact activities for the Northern Cloud Crime Centre, including publications to first tier conferences and leading journals

3. Working with local, national and international partners of the Northern Cloud Crime Centre in the development and delivery of effective methods and systems for detection, prosecution and prevention of cloud crime.

4. Contributing to system development for building an effective framework for detection, prosecution, and prevention of cloud crime.

5. Contributing to the supervision and undertaking day-to-day management of postgraduate students at Newcastle University's School of Computing Science.

6. Leading and contributing to new machine learning project funding applications.

7. Contributing to the coordination of the School of Computing Science, Open Lab/ICOS/Secure &Resilient Systems Research Group, and the Northern Cloud Crime Centre's research network of academic, commercial, government and third sector collaborators.

8. Initiating and developing research collaborations on behalf of the Centre with researchers from disciplines other than computer science. Contributing to University, School of Computing Science, the ICOS/Open Lab/Secure & Resilient Systems research group, and Centre's public engagement activities (including School and University open days)

Research Role Profile

As part of our commitment to career development for research staff, the University has developed 3 levels of research role profiles. These profiles set out firstly the generic competences and responsibilities expected of role holders at each level and secondly the general qualifications and experiences needed for entry at a particular level. It is unlikely

that any single member of staff will be applying all these competences at any one time but he or she would be expected to display most of them over a period of time.

Please follow this link to our [Research Role Profiles](#)

Person Specification

Knowledge (inc. qualifications)

Essential
- PhD awarded (or close to completion) in machine learning and its applications with very strong machine learning delivery and project management skills
- Internationally recognized expert in machine learning and its applications (indicated through outstanding track record), with particular expertise in (a combination of) supervised and unsupervised learning, time series analysis, deep learning, knowledge discovery and model explanation tasks

Skills (professional, technical, managerial, practical)

Essential
- Very strong machine learning delivery skills
- Strong software development skills
- Very strong project management skills
- Excellent written and oral communication skills

Experience and Achievements (paid or unpaid)

Essential
- International outstanding research and/or practice outputs in machine learning and its application
- Strong interests of cyber-security, cloud computing, and time-series analysis

Desirable
- Strong machine learning experience and proficiency in the state of the art data science languages (e.g., python, R)
- Experience in deep learning, supervised and unsupervised learning, and time-series analysis, information visualisation
- Familiarity with high performance computing environments (e.g., HPC clusters, GPUs, Cloud resources)
- Experience in working in highly interdisciplinary environments
- Track record of delivering systems of machine learning for real-world applications
- Significant experience of project management and team leadership

Other

Essential

- Available for national and international travel and occasional weekend working

For additional details about this vacancy and essential information on how to apply, visit our Job Vacancies web page at http://www.ncl.ac.uk/vacancies/