Research Centre: ADAPT Centre, Centre for Digital Content Platform Research

Post title: Post-Doctoral Researcher in Statistical Machine Translation (Spokes) – Two Posts

Level on Framework: Level 1

Post duration: Two Years

As part of this role the researchers will be required to participate in the DCU Research Career Framework. This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

Background & Role(s)

The ADAPT Centre for digital content platform technology seeks to appoint two postdoctoral researchers in Statistical Machine Translation (SMT) on the targeted research programme which addresses the research and development interests of ADAPT industry partners. It is envisaged that the two posts will commence in September 2015.

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, and Dublin Institute of Technology) with that of its industry partners to produce ground-breaking digital content innovations.
ADAPT brings together more than 120 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. With €50M in new research funding from Science Foundation Ireland and industry, 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.

**Principal Duties and Responsibilities**

The successful candidate will work within a large group of Postdoctoral researchers, PhD students and Software Developers. The work of this post-doctoral researcher will be fundamental in applying ADAPT research breakthroughs in SMT to application areas identified by our commercial partners, with whom the researcher will necessarily work closely.

Reporting to his/her Principal Investigator the Postdoctoral Researcher will:

- Research solutions to problems identified by industry partners in the application of SMT in their translation pipelines. This may include, but is not limited to, the following:
  - domain adaptation of existing models to new application areas,
  - improved reordering models,
  - online/offline iterative retraining,
  - MT integration with Translation Memory systems,
  - integration of terminology in SMT models,
  - hybrid SMT—Rule-Based systems,
  - cross-lingual search.
- Produce top-quality journal and conference publications, in collaboration with the PI, and, where appropriate, industry partners.
- Identify and write proposals for research funding.
- Participate in ADAPT centre activities, such as industry showcases and annual reviews.
- Provide support and advice to any PhD students working on the same project.
- Contribute to teaching and supervision in the School of Computing.
- Report on progress at meetings and in writing to ADAPT Centre Management.
- Assist in identifying and developing future research and funding initiatives.
- Engage in the dissemination of the results of the research in which he/she is engaged with the support of and under the supervision of the Principal Investigator.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
- Liaise with both internal and external stakeholders including industry and academic partners/collaborators.
- Carry out administrative work associated with the programme of research as necessary.

**Funding Information**

The position is funded through the Science Foundation Ireland (SFI) ADAPT Research Centre.
Minimum Criteria

It is essential that applicants have a PhD in Machine Translation or a related discipline. In addition, it is desirable that the candidate has:

- Demonstrable experience in the translation and/or localisation industry.
- A strong background in statistical machine translation and translation technology, with a particular emphasis on Moses-based SMT models
- Excellent machine-learning skills.
- Excellent programming skills.
- Excellent research skills, with experience, ideally, in the following:
  - SMT system-building and deployment expertise,
  - a wide knowledge of automatic and human MT evaluation metrics,
  - up-to-date knowledge of the main areas of application for SMT in industry and academia,
  - cloud-based models of translation,
  - machine learning.

Salary: €37,750 - €46,255
Appointment will be commensurate with qualifications and experience.

Closing date: Tuesday 9th June, 2015

Candidates will be assessed on the following competencies:

Discipline knowledge and Research skills – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline and in collaboration with industry partners.

Understanding the Research Environment – Demonstrates an awareness of the research environment (for example funding bodies and key industry players) and the ability to contribute to grant applications

Communicating Research – Demonstrates the ability to communicate their research with their peers, with industry partners, and with the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students

Managing & Leadership skills - Demonstrates the potential to manage a research project including the supervision of undergraduate students and to meet industry partner expectations regarding project turn-around times.
Application Procedure

Informal Queries to: Aoife Brady Aoife.brady@adaptcentre.ie. Please include the ADAPT Position Title in all email communications. Please do not send applications to this email address, instead apply as described below.

Application forms are available from the DCU Current Vacancies (open Competitions) website at http://www.dcu.ie/vacancies/current.shtml and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 7005149.

Please clearly state the role that you are applying for in your application and email subject line: Job Ref #86: Post-Doctoral Researcher in Statistical Machine Translation (Spokes)

Applications should be submitted by email to hr.applications@dcu.ie or by Fax: +353 (0)1 7005500 or by post to the Human Resources Department, Dublin City University, Dublin 9. Human Resources Department, Dublin City University, Dublin 9. Tel: +353 1 700 5149; Fax: +353 1 700 5500 Email: hr.applications@dcu.ie

Dublin City University is an equal opportunities employer