



Research Centre:	ADAPT Centre for Digital Content Technology at DCU (Affiliate Project)
Post title:	Research Fellow IRC-IF-2020
Level on Framework:	Level 2
Post duration:	Fixed Term Contract up to 22 Months

Research Career framework

As part of this role the researcher 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. 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.

Background & Role Profile

The ADAPT Centre for digital content platform technology seeks to appoint an Irish Research Council Individual Research Fellow investigating Document-Level Machine Translation Evaluation. This post will commence in December 2020.

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 240 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 €100M 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.

Duties and Responsibilities:

The successful candidate will work within a large group of postdoctoral researchers, PhD students and software developers. The work of the Research Fellow will be in the area of Document-Level Machine Translation (MT) Evaluation as identified in the research grant agreed with the IRC. The successful candidate will be affiliated with the SFI ADAPT project Theme B Transforming Global Content. He/she is expected to combine both applied research and platform research.

Reporting to his/her Principal Investigator the Research Fellow will:

- Research the translation quality of document-level MT systems.
- Complete a 2-month secondment in University of Groningen in 2021, under the supervision of Dr Antonio Toral, and a 2-month secondment in University of Zurich in 2022 under the supervision of Dr Rico Sennrich.
- Consolidate the knowledge acquired during the secondment through implementation of semantic-based metrics for MT evaluation, and document-level interactive MT modelling and evaluation.
- Test context span for document-level evaluation.
- Construct context-aware challenge test sets.
- Investigate the state-of-the-art automatic metrics for document-level evaluation, and implement new ones if necessary.
- Investigate the state-of-the-art human metrics for document-level evaluation and define new ones if necessary.
- Gather specifications to design a document-level evaluation tool.
- Provide support and advice to PhD students, as well as to others working in the centre.
- Identify and write proposals for research funding.
- Produce top-quality journal and conference publications in collaboration with the Principal Investigator.
- Participate in ADAPT Centre activities, such as industry showcases, annual reviews and industry targeted projects.
- Report on progress at meetings and in writing to ADAPT Centre management.
- 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.

Qualifications and Experience:

It is essential Applicants should have a PhD in Machine Translation Evaluation. Applicants should also preferably have a minimum of 4 years relevant postdoctoral/industry-related research experience or equivalent at post-doctoral researcher level.

In addition, it is desirable that the candidate has a subset of the following skills:

- Deep knowledge of up-to-date MT technologies.
- Practical experience in MT, ideally, in at least two of the following areas:
 - Automatic and human MT evaluation metrics,
 - Translation quality estimation,
 - User evaluation,
 - Translationese.
- Familiarity with MT deployment in a range of use-cases.
- Good programming skills.
- Excellent presentation and communication skills.
- Excellent team-working skills.

Candidates will be assessed on the following competencies:

Discipline specific knowledge and Research Skills (demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline)

Communicating Research (Demonstrates the ability to communicate their research with their peers and 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)

Understanding the Research Environment (demonstrates an awareness of the research environment (e.g. funding bodies) and takes responsibility for how their research is conducted)