4REAL Workshop Workshop on Replicability and Reproducibility of Research Results in Science and Technology of Language

12 May 2016 Miyazaki, Japan

Collocated with LREC2018 11th Language Resources and Evaluation Conference http://lrec2018.lrec-conf.org

Important dates:

15 January 2018: Deadline for submissions 9 February 2018: Notification of authors 1 March 2018: Deadline for camera-ready 12 May 2018: Workshop

Call for papers:

Reproduction and replication of research results are at the heart of the validation of scientific knowledge and of the scientific endeavor. Reproduction of results entails arriving at the same overall conclusions that is, to appropriately validate a set of results, scientists should strive to reproduce the same answer to a given research question by different means, e.g. by reimplementing an algorithm or evaluating it on a new dataset, etc. Replication has a more limited aim, typically involving running the exact same solution or approach under the same conditions in order to arrive at the same output result.

Despite their key importance, reproduction and replication have not been sufficiently encouraged given the prevailing procedures and priorities for the reviewing, selection and publication of research results.

The immediate motivation for the increased interest on reproducibility and replicability is to be found in a number of factors, including the realization that for some published results, their replication is not being obtained (e.g. Prinz et al., 2011; Belgley and Ellis, 2012); that there may be problems with the commonly accepted reviewing procedures, where deliberately falsified submissions, with fabricated errors and fake authors, get accepted even in respectable journals (e.g. Bohannon, 2013); that the expectation of researchers vis a vis misconduct, as revealed in inquiries to scientists on questionable practices, scores higher than one might expect or would be ready to accept (e.g. Fanelli, 2009); among several others.

This workshop seeks to foster the discussion and the advancement on a topic that has been given insufficient attention in the research area of language processing tools and resources and that has been an important topic emerging in other scientific areas, continuing the objectives of the first edition of the 4REAL workshop, at LREC 2016. We are thus inviting submissions of articles that present cases, either with positive or negative results, of actual replication or reproduction exercises of previous published results in our area.

Specific topics within the scope of the call include, but are not limited to, the following:

- Reproduction and replication of previously published systems, resources, results, etc.
- Analysis of reproducibility challenges in system-oriented and user-oriented evaluation.
- Reproducibility challenges on private or proprietary data.
- Reproducibility challenges on ephemeral data, like streaming data, tweets, etc.
- Reproducibility challenges on online experiments.
- Reproducibility in evaluation campaigns.
- Evaluation infrastructures and Evaluation as a Service (EaaS).
- Experiments on data management, data curation, and data quality.
- Reproducible experimental workflows: tools and experiences.
- Data Citation: citing experimental data, dynamic data sets, samples, etc.

We are interested also in articles discussing the challenges, the risk factors, the appropriate procedures, etc. specific to our area or that should be adopted, or adapted from other neighboring areas, including methodologies for monitoring, maintaining or improving citation of language resources and tools and to assess the importance of data citation for research integrity. This includes also of course the new risks raised by the replication articles themselves and their own integrity, in view of the preservation of the reputation of colleagues and works whose results are reported has having been replicated, etc.

"Replicability Focus" in Language Resources and Evaluation Journal:

Best papers will be invited to be submitted to the Language Resources and Evaluation Journal under its new "Replicability Focus".

"Identify, Describe and Share your LRs!" initiative:

Describing your LRs in the LRE Map is now a normal practice in the submission procedure of LREC (introduced in 2010 and adopted by other conferences). To continue the efforts initiated at LREC 2014 about "Sharing LRs" (data, tools, web-services, etc.), authors will have the possibility, when submitting a paper, to upload LRs in a special LREC repository. This effort of sharing LRs, linked to the LRE Map for their description, may become a new "regular" feature for conferences in our field, thus contributing to creating a common repository where everyone can deposit and share data.

As scientific work requires accurate citations of referenced work so as to allow the community to understand the whole context and also replicate the experiments conducted by other researchers, LREC 2018 endorses the need to uniquely Identify LRs through the use of the International Standard Language Resource Number (ISLRN, <u>www.islrn.org</u>), a Persistent Unique Identifier to be assigned to each Language Resource. The assignment of ISLRNs to LRs cited in LREC papers will be offered at submission time.

Organization committee:

António Branco (University of Lisbon) Nicoletta Calzolari (ILC) Khalid Choukri (ELRA)

Program committee (to be confirmed):

António Branco (University of Lisbon) Iryna Gurevych (Universität Darmstadt) Joseph Mariani (CNRS/LIMSI) Justus Roux (NWVU) Kevin Cohen (University of Colorado) Khalid Choukri (ELRA) Maria Gavrilidou (ILSP) Marko Grobelnik (Jozef Stefan Institute) Marko Tadic (University of Zagreb) Mike Rosner (University of Malta) Nicoletta Calzolari (ILC) Piek Vossen (VU University Amsterdam) Senja Pollak (Jozef Stefan Institute) Stelios Piperidis (ILSP) Steven Krauwer (University of Utrecht) Thierry Declerck (DFKI) Torsten Zesch (University of Duisburg-Essen) Yohei Murakami (Language Grid Japan)

**References:** 

Begley and Ellis, 2012, Drug development: Raise standards for preclinical cancer research, Nature Bohannon, John, 2013, Who's Afraid of Peer Review?, Science Fanelli,2009 How Many Scientists Fabricate and Falsify Research? Prinz, et al., 2011, Believe it or not: how much can we rely on published data on potential drug targets?, Nature Reviews Drug Discovery 10, 712.