UNIVERSIDADE DA CORUÑA   citic   USC CiTIUS   LINKNOVATE

Open positions
Big-eRisk: Early prediction of personal risks on massive data
(PLEC2021-007662)

Project Summary:

Mental disorders are complex and can manifest in very different ways. In 2017, **792 million** people lived with some kind of mental problem. Experts have recently warned that the aftermath of the current COVID-19 situation can put mental health problems as the next global pandemic. An **early diagnosis** is key to success in the treatment of those issues. **Social media** is a valuable source where we can find evidence related to people at risk of suffering from mental health problems. Users can preserve their anonymity while receiving the support and experience of others.

Since 2017, we have been promoting this line of research. **eRisk** (https://erisk.irlab.org/) is a shared-task international campaign that explores evaluation methodologies, effectiveness metrics and practical applications (particularly those related to health and safety) of early risk detection on the Internet. In the last five years of this international competition, we have released many datasets for risks such as depression, eating disorders, self-harm or pathological gambling. We have formed a solid interdisciplinary team to carry out **Big-eRisk,** including two organizers of eRisk, **Javier Parapar** and **David E. Losada**. The team, led by the **University of A Coruña**, includes the **University of Santiago de Compostela**, and **Linknovate**, a research-intensive Stanford University start-up with strong ties with the teams from the Universities.

Open Positions:

- 2 PostDoc Positions (CITIC would hire one postdoc at the University of A Coruña, and CiTIUS would hire another at the University of Santiago de Compostela).
- 2 PhD Positions in Computing Science (CITIC would hire one candidate at the University of A Coruña and CiTIUS would hire another at the University of Santiago de Compostela).
- 1 PhD Position in Psychology (hired by CITIC at University of A Coruña).

The hired researchers would work on the main challenges of the project, which include:

- Developing large collections and resources for early prediction of risks of psychological disorders.
- Defining effective textual and semantic search and filtering methods at scale for locating pieces of texts as candidate evidence of psychological disorders.
- Developing domain-related linguistic resources for training massive neural language models and supporting natural language processing methods.
- Developing efficient models for the crawling, ingestion, and massive processing of social media data at scale.
- Defining hybrid intelligence methods for supervised and semi-supervised inclusion of expert knowledge of the mental health professionals, revision and validation.
- Developing trustable resource recommendation models for individuals at risk with reactive and adaptable suggestions.

Postdoc Positions:

You must have a PhD in computer science, information studies or equivalent. Research experience in information retrieval, machine learning or natural language processing is desirable.

Each postdoc contract is for a period of 1 year (with the possibility of extension) and a gross salary of approx. 29.000 €/year plus medical care coverage, work accident insurance through the Spanish Health Care System, coverage for unemployment, and pension contribution by the employer.

PhD Positions in Computer Science:

You must have a BSc in CS or related fields and a Master's degree completed (or meet the requirements for PhD enrollment access) at the time of appointment.

PhD Position in Psychology:

You must have a BSc in Psychology and Master's degree completed (or meet the requirements for PhD enrollment access) at the time of appointment.

Each PhD contract is for a period of 1 year (with the possibility of extension) and a gross salary of 22.000 €/year plus medical care coverage, work accident insurance through the Spanish Health Care System, coverage for unemployment, and pension contribution by the employer.

These contracts would start around January 2022 (we are flexible about the starting dates).

To apply, send your CV, research statement, and contact information to irlab@udc.es.

Deadline for expressions of interest: 30/11/2021

Our universities are certified under the HRS4R seal. The Human Resources Strategy for Researchers identifies the research institutions and organizations supporting a favourable and boosted work environment and guarantees an OMT (Open, Merit-based and Transparent) recruitment process.