PhD-position Health Informatics / AI (0.8-1.0 FTE)

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Location Utrecht University, The Netherlands
Contract 3-5 years
Salary 2325 - 2972 euro per month (full day) + 8% holiday bonus + 8.3% yearly bonus.
Deadline April 7, 2020
Working hours 32-40 hours weekly

https://www.uu.nl/en/organisation/working-at-utrecht-university/jobs/phd-position-health-informatics-08-10-fte

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Job description

Join the Utrecht Institutes for Information and Computing and Risk Assessment Sciences in developing an AI-induced standard for unveiling job illness. You will work on the ANSES project Unlocking the vaults of occupational exposure and health data (OPERAS).

Background

Large (occupational) epidemiological studies have been designed to have the power to detect exposure-response associations for a wide range of agents. High quality exposure assessment is crucial in such studies on occupational causes of diseases to estimate the prevalence and level of occupational exposure in the general population, to identify and quantify the potential risks associated with work circumstances and exposures, and to estimate the benefits in health and work participation from specific interventions and policies. The coding of each individual’s job history, an essential first step in the exposure assessment process, however, can be daunting and prohibitively time-consuming. As a result, many of the large studies are not maximally used for occupational health outcomes.

In OPERAS you will:

1. develop algorithms to automatically code free-text entries of job titles, tasks, and industries into international standard classification of occupations (ISCO) and industries (ISIC/NACE);
2. develop a Decision Support System (DSS): codes with low reliability will be flagged by the expert system and highlighted to assure a final check of a human coder; and
3. validate the algorithms and the DST, using the French CONSTANCES cohort (200,000 entries) and the Dutch LIFEWORK cohort (25,000 entries).

In case you will be selected for the second round, an extensive project description will be provided.
Qualifications
We are looking for a candidate with a strong motivation to pursue a PhD-degree with:
- a degree in Computer Science, Artificial Intelligence, Cognitive Science, Information Science, Health Sciences, Biomedical Engineering, or a related field;
- good programming skills;
- excellent English academic writing and presentation skills.
In addition, desirable skills are:
- your background in knowledge representations, semantics, and natural language processing;
- your strong interest in interdisciplinary scientific work;
- your team player spirit;
- your working knowledge of the French language.

Offer
We offer a temporary position (0.8 - 1.0 FTE) for 3-5 years in an international working environment. The gross salary starts at € 2.325 and increases to € 2.972 per month in the fourth year (scale P according to the Collective Labor Agreement Dutch Universities) per month for a full-time employment. Salaries are supplemented with a holiday bonus of 8% and a year-end bonus of 8.3% per year. In addition, Utrecht University offers excellent secondary conditions, including an attractive retirement scheme, (partly paid) parental leave and flexible employment conditions (multiple choice model). More information about working at Utrecht University can be found here.

About the organization
A better future for everyone. This ambition motivates our scientists in executing their leading research and inspiring teaching. At Utrecht University, the various disciplines collaborate intensively towards major societal themes. Our focus is on Dynamics of Youth, Institutions for Open Societies, Life Sciences and Sustainability.

At the Faculty of Science there are 6 departments to make a fundamental connection with: Biology, Chemistry, Information and Computing Sciences, Mathematics, Pharmaceutical Sciences and Physics. Within each department there are distinct institutes which focus on answering some of humanity’s most pressing problems. These institutes are further broken up into research groups.
The Department of Information and Computing Sciences is internationally renowned for its research, often with an interdisciplinary stance. Current research divisions are algorithms, intelligent software systems, and interaction. The department has close collaborations with the Utrecht University Medical Center, the other departments of the Faculty of Science, and the Faculties of Medicine and Veterinary Medicine. The current project is in close cooperation with both the Institute for Risk Assessment Sciences (IRAS) of the latter two faculties and with INSERM, the renowned French public research organization dedicated to human health.

Additional information
Additional information about the vacancy can be obtained from dr dr Egon L. van den Broek via e.l.vandenbroek@uu.nl.

Apply
Everyone deserves to feel at home at our university. We welcome employees with a wide variety of backgrounds and perspectives.

Are you interested? Please apply for the position by clicking on the “Apply” button, enclosing:

- a detailed CV in English;
- scans of BSc and/or MSc transcripts (incl. grade list), with certified translation in English if the degree qualification is not Dutch or English;
- your BSc and/or MSc-thesis;
- a motivation letter in English;
- contact details or recommendation letters of two referees in English or in a certified translation;
- a scanned copy of a valid identification document;
- for non-native English speakers except Dutch applicants, a proof of excellent command of English (e.g., IELTS, TOEFL, Cambridge, or equivalent).

As part of the selection procedure, the candidate is expected to give a presentation of both his/her MSc-project and research plans as well as his/her motivation, both in a written report and an oral presentation.

Estimated starting date: 1 July 2020

If this specific opportunity is not for you, but you know someone who may be interested, please forward the link to them.

Some connections are fundamental – Be one of them