



The Netherlands Interdisciplinary Demographic Institute (NIDI-KNAW-RUG) and the The Meertens Institute (KNAW) have a vacancy for:

One PhD position (0.8 – 1 FTE) in machine learning for the measurement of fertility intentions

Job description

The PhD project is part of the newly funded project “Using machine learning to improve the measurement of the European fertility gap”. The overall aim is to improve our understanding of fertility intentions by combining data from open-ended and close-ended questions from a unique large population-based demographic survey. The innovation will consist in the use of natural language processing and machine learning techniques to analyze the data. The PhD project is expected to contribute to the emerging field of computational demography. Substantially, it is expected also to help reduce the degree of uncertainty inherent in questions on fertility intention in surveys. This project is part of the Generations and Gender Programme (GGP) which is a multinational research infrastructure devoted to the study of population and family dynamics.

The candidate will write a PhD dissertation based on a set of research articles publishable in international refereed journals. He/she will participate in meetings of the NIDI Theme Group Families & Generations, and other relevant research groups. He/she will be supervised by prof. dr. Anne H. Gauthier (NIDI-RUG), dr. Gert Stulp (RUG) and prof. dr. Antal van den Bosch (Meertens).

Qualifications

For this position, we are looking for candidates who can demonstrate a willingness and ability to invest in machine learning techniques, and can relate the findings to the substantive field of family demography.

Specifically, we are looking for a candidate with:

1. A strong quantitative background in social sciences, demography, humanities or data science
2. Experience and affinity with advanced statistical or computational methods (e.g. R or Python) and experience in the analysis of large datasets (e. g. survey, register, or big data)
3. Demonstrated research experience (e.g. Research master) and published article(s) or presentation(s) at academic conferences
4. Excellent knowledge of English (essential) and Dutch (desirable)
5. Excellent writing and social skills

6. Knowledge of family demography or family sociology (this is an asset but it is not required).

Appointment and salary

The candidate is expected to start in September 2020. The initial appointment will be for a period of 1 year. After positive evaluation, the appointment will be extended for another 3 years. A psychological assessment may be part of the selection procedure.

The gross monthly salary will be between € 2,325 (year 1) and € 2,972 (year 4). Benefits include pension contribution, annual holiday premium of 8% and an end-of-year premium of 8.3%. Non-Dutch nationals may be eligible for a substantial tax break (30% ruling).

Place of work

NIDI, Lange Houtstraat 19, The Hague

Information

For additional information you may contact Prof. dr. Anne H. Gauthier (gauthier@nidi.nl).

Application procedure

Candidates are invited to submit their application in English. Applicants should send in one single pdf file:

- Cover letter (max 2 pages) which explains the motivation for applying for this position as well as the fulfillment of all qualification criteria
- Curriculum vitae
- Copy of university grades (transcript)
- One sample of written work, e.g. copy of master dissertation or published article
- Names and addresses of two referees

The deadline for submitting your application is 5 June 2020. Please send your application to the director of NIDI, Prof. dr. L.J.G. van Wissen (hr@nidi.nl). The interviews for this position have been provisionally scheduled for mid-June June (online). A second round of interviews may be part of the selection procedure.

For more information on NIDI, please visit our website at <http://www.nidi.knaw.nl>

Acquisition based on this advertisement is not appreciated.