3-Year PhD Position

Data Science for Crisis Response and Intervention

Complexity Science Hub Vienna, Austria

€ 31,326 gross/year (30h*)

Applications will be reviewed from October 1st



The <u>Complexity Science Hub Vienna</u> is a fast-growing research institution dedicated to a quantitative and predictive understanding of complex systems for the improvement of society. We provide an exciting and creative environment for open-minded visionaries who want to make a difference.

PhD TOPIC

The increasing frequency of natural disasters, caused by severe weather phenomena and fueled by climate change, has become an undeniable reality. It is thus highly likely that in our post-pandemic society disaster and crisis management will face increased challenges in managing such natural disasters. The "Crisis Response and Intervention Supported by Semantic Data Pooling" (CRISP) project aims to address these challenges in a data-driven manner, enabling more effective crisis response and intervention, considering both the short-term management of disasters as well as long-term economic impact assessments, at fine-grained regional and temporal granularity.

The successful candidate will work on a PhD in applied computer science from the Vienna University of Economics and Business (WU Wien). The candidate will work within the framework of a research project, funded by the FFG, that investigates how data from various sources including the Austrian weather service, social and online media, the insurance industry, and local municipalities can be combined and analyzed to improve disaster preparedness.

YOUR PROFILE

We are looking for a bright young scientist and critical thinker who is interested in the substantive topic of this project, has a collaborative spirit and feels comfortable within an interdisciplinary environment.

The successful candidate will have the following profile

- Have completed or be close to completing a Master's degree or equivalent in a quantitative science (natural sciences, economics, computational social science, computer science, mathematics, geography, etc.).
- A Master's thesis or equivalent work showing data handling, modeling, and machine learning skills.
- · Willingness to work independently and together with project partners from a variety of backgrounds
- Have programming experience in modeling and data wrangling (i.e Python/R/Julia/Matlab & SQL).
- Proficiency in English (written and spoken), some proficiency in German is appreciated
- An interest and willingness to learn tools and methods as needed.

If you are eager to learn how we can better prepare for future natural disasters from diverse sources of information, please apply! We strongly encourage women and people from minority backgrounds to apply.

WE OFFER

A fully funded 3-year PhD position in applied computer science in an exciting research environment at the Complexity Science Hub Vienna with access to a network of world-renowned researchers and a great community of talented, young and motivated PhD and Post-Doc researchers. The candidate will be supervised by Axel Polleres, Vito Servedio and Johannes Wachs, and work closely with project partners. The position has a target starting date of December 1, 2021.

APPLICATION

Please send your application materials to office@csh.ac.at with the subject line: "PhD Application CRISP", including a CV (including degrees, previous research and work experience, and programming knowledge), a max two-page motivation letter, a copy of the Master' thesis (or equivalent scientific writing sample). Please also include names and email addresses of at least two people that are willing to write a letter of recommendation for you.

Personal data is processed in accordance with the law (https://www.csh.ac.at/data-protection/).

^{*} according to the rate of the Austrian Science Fund.