3-Year PhD Position

Network Science of Crime

# Complexity Science \*Hub

Complexity Science Hub Vienna € 37,557 gross/year, part time (30h)

The <u>Complexity Science Hub Vienna</u> is a young research institution dedicated to a deeper quantitative and predictive understanding of complex systems for the betterment of society. We provide an exciting, creative, bureaucracy-free environment for open-minded visionaries who want to make a change and are brave enough to step out of mainstream science.

# **3-YEAR PhD POSITION**

# **Network Science of Crime**

## **RESEARCH TOPIC**

The successful candidate will conduct research in the area of network science of crime and will develop statistical methods and simulation tools that can be used for strategic analysis of networks in the context of crime. He or she will evaluate existing and develop new innovative (AI) tools from data, network, and complexity science to understand the organization and social interactions of crime. This includes work on interactive graph analysis networks, use of graph data for research purposes, research and evaluation of existing AI solutions, method development and the analysis of big data.

#### YOUR PROFILE

We are looking for an excellent young scientist with a Master's degree (or equivalent) with a quantitative focus (e.g. data or network science, physics, mathematics). In your Master's thesis, you have successfully shown your quantitative research skills. You have the ability to independently carry out data-intensive research and show good programming (e.g., Python, R, Julia), modelling and quantitative skills. Knowledge of data transformation and orchestration tools like DBT and Dagster are a plus. Proficiency in English (written and spoken). German skills are a plus. We search for critical thinkers that are open-minded, have a collaborative spirit and feel comfortable within an interdisciplinary environment cutting across network science, complex systems science and social network analysis.

### **WE OFFER**

A fully funded 3-year PhD position in an exciting research environment at the Complexity Science Hub, close collaboration with colleagues from other research teams, access to a network of world-renowned researchers and a great community of talented, young, and motivated PhD and Postdoc researchers. The PhD will be supervised in the group of Stefan Thurner. The position is available as soon as possible.

### **APPLICATION**

Please send your application to applications@csh.ac.at with the subject line "PhD Network Science of Crime". Application material includes a CV, a list of publications (if applicable), and a one-page vision letter (What is your vision for scientific research? What would you like to discover in your future scientific life? Why are you interested in the topic?), a copy of your master's thesis, and any additional material showing your computational skills and creativity. Please also include names and full contact addresses of at least one person that is willing to write a letter of recommendation for you.

CSH is committed to the principle of equal employment opportunity for all applicants. All employment decisions are therefore based on job requirements, qualifications, merit, and organizational needs. We strongly encourage individuals from underrepresented groups to apply.

We process your personal data in accordance with the law (www.csh.ac.at/data-protection/).