POSTDOCTORAL RESEARCH SCHOLAR: ADVANCED SYSTEMS ANALYSIS (ASA) PROGRAM

Vacancy 01/2019 - The Advanced Systems Analysis (ASA) Program is offering a postdoctoral position working with data-driven multi-layer network approaches to quantify systemic risk and resilience.

We are searching for: An excellent early stage scientist with a PhD or equivalent in physics, mathematics, computer science, economics, or related fields. Ideally, you have experience in working with financial network data and agent based models, are eager to extend your knowledge in network analysis, data mining, and large-scale agent based models. You should have good programming skills and experience, and a critical, open-minded, entrepreneurial, and collaborative spirit.

We offer: A fully funded postdoctoral position in an internationally renowned institution, _IIASA_. The research group working on the project includes also scientists from the _Complexity Science Hub Vienna (CSHV), Austria_. The successful candidate will be expected to collaborate with researchers at IIASA and CSH and will have the opportunity to work on the empirical analysis of unique financial data in order to understand the origin and spreading of systemic risk on multi-layer networks and the emergence of resilience. A further aim in the group is the development of large-scale agent-based simulation models, which the candidate would also be involved in.

Your profile: Having gained relevant research experience during the completion of your PhD or equivalent; you must be proficient in English both written and spoken. We expect you to have the proven ability to independently carry out data-intensive research as exemplified by your past works that showcase your strong programming and mathematical skills. Analytical and numerical skills both for data handling, data cleaning, and programming are necessary. Experience in design and implementation of data mining projects would be ideal.

Appointment Terms: The successful applicant will be initially be offered a full-time employment contract for two years. Depending on the availability of funding, there may be a possibility to extend the contract for a third year.

IIASA offers a competitive salary (based on qualifications and experience) together with a benefits package which includes home leave, moving and settlement allowances, educational grants for children of school age, and five weeks' annual vacation. IIASA salaries are exempt from taxation in the host country of Austria, subject to the principle of income aggregation.

Applications: To apply, please email a cover letter outlining your motivation for applying, a curriculum vitae, a list of publications and any additional relevant material evidencing your mathematical excellence, computational skills, and creativity as well as the names and full contact details of at least one work-related reference giver to:

>   Harrison, Alia
>   Recruitment Coordinator Human Resources
>   +43(0) 2236 807 286
>   harrison@iiasa.ac.at

Deadline for receipt of applications: 1 February 2019 (the successful candidate is expected to take up the position in March 2019).

For further information about this position, please contact:

>   Thurner, Stefan
>   Senior Research Scholar Advanced Systems Analysis,
>   President of the Complexity Science Hub Vienna
>   thurner@iiasa.ac.at

IIASA is a member of the Complexity Science Hub Vienna (CSH). The objective of the **CSH** is to host, educate and inspire scientists who are dedicated to collecting, handling, aggregating and making sense of big data in ways that are directly valuable for science and society. We seek to provide an exciting, creative environment free of bureaucratic constraints for open minded visionaries who are brave enough to step out of mainstream science.

For general information about our Institute and our research activities, please visit the IIASA web site.

www.iiasa.ac.at
www.csh.ac.at

About Laxenburg (near Vienna):

IIASA is located in a former 18th century imperial palace of the Habsburg Monarchy in Laxenburg, Austria about 15 km from Vienna. The facility has been gratefully provided by the host country Austria to the International Scientific Community. According to Mercer's 19th annual Quality of Living survey, Vienna ranks highest for quality of living for the 9th year in a row in 2018. The survey covers 450 cities worldwide and is based on 39 criteria such as political, social, economic, educational, and environmental factors. Vienna has all the facilities of a modern, progressive city, in the heart of Europe.

While famous for its concert venues, opera houses, theaters, and museums, Vienna also provides opportunities for great outdoor activities on nearby Lake Neusiedl, the Vienna Woods, and the Alps. Vienna has a wealth of different research and international governmental institutions, permitting extensive dialogue at local and international level between scientists and policymakers.