Research Fellow Position under the Future Resilient Systems Program – about Measuring, Modeling, and Enhancing Social Resilience at NTU Singapore

The Singapore-ETH Centre (SEC), partnering ETH, NTU, NUS, and UIUC hosts the Future Resilient Systems (FRS II) Program aiming to develop methods and tools to make infrastructure systems more robust and resilient.

The Research Fellow position about Measuring, Modeling, and Enhancing Social Resilience will work with Prof Hans Herrmann (ETH Zurich) and A/P Cheong Siew Ann (NTU) to build and simulate complex network models, to understand how a community can recover critical social functions after a crisis. The Research Fellow is expected to assist Prof Herrmann and A/P Cheong to collect data from the literature, and to communicate with Prof Renate Schubert (ETH Zurich) and A/P Eko Riyanto (NTU), and their research team to incorporate their empirical findings into the complex network models. This position is part of Module 3.1 of Cluster 3 of FRS II on Distributed Cognition Enabled by Data Science which focuses on the collection of data related to the social dimensions of resilient infrastructure.

The candidate should have a PhD degree preferably in Statistical Physics or Mathematics, and should have experience building, analyzing, simulating complex network models, and published in this area. The candidate should have excellent analytical and programming skills, good problem solving and organizational skills, and also strong written and oral communication skills with demonstrated ability to conduct clear presentations and prepare written reports. In addition, the candidate should be highly committed and motivated, and be able to work in a highly interdisciplinary environment.

Qualified applicants are strongly encouraged to contact either HJ Herrmann (hans.herrmann@espci.fr) or SA Cheong (cheongsa@ntu.edu.sg) with their academic qualification along with a detailed CV and list of publications. The position is open until filled.