

## Job Description for Full-Time Research Fellow

We are looking for a suitable candidate to work as a full-time Research Fellow under the supervision of Professor KE Bin, Provost's Chair Professor at NUS Business School. The hired Research Fellow will work with Professor KE Bin and his co-PIs in business and computer science to use state-of-the-art machine learning and text mining methods to model large-scale and dynamic networks in the business/finance domain. The hired research fellow will also be expected to apply such models to real world data. Examples of such networks include online social investing platforms, real-world business supply chain networks, etc. This position is especially suitable for candidates who have a computer engineering background but wish to conduct interdisciplinary research in the business domain.

This research is part of a large research grant under the theme of Future Resilient Systems (FRS) funded by the Singapore National Research Foundation in partnership with ETH of Switzerland. Please refer to <https://frs.ethz.ch/> for more information about the research topics undertaken by the FRS program. The hired research fellow will be housed on the beautiful Campus for Research Excellence and Technological Enterprise (CREATE) in Singapore (<https://www.nrf.gov.sg/programmes/create>). The hired research fellow will have many opportunities to interact with other research assistants under the FRS program and learn from renowned visiting faculty from around the world.

### **Responsibilities:**

- A willingness to learn basic domain knowledge in business/finance/accounting;
- Work with domain experts to use structured and unstructured data to develop financial network models using state-of-the-art machine learning and text mining techniques.

### **Qualification requirements:**

- Have a PhD degree in computer science or other related disciplines (PhD students close to graduation can apply too);
- High proficiency in machine learning modeling based on structured and unstructured data, especially in the financial domain;
- Candidates who have the expertise in machine learning areas such as graph analytics and mining, temporal point processes, time series, and deep learning are highly valued;
- High proficiency in natural language processing using Python and other relevant programming skills;
- Related prior research experience is a plus;
- Evidence of creativity and innovation is highly valued;
- The candidate must be independent, responsible, hard-working, detail oriented, and perfection-seeking;
- Ability to work as a team is a must;
- Excellent verbal and written communication skills;
- Willingness to learn new things and accept challenges;
- Candidates who understand both Chinese and English are preferred because some data used in the project will be in Chinese language.

The duration of the initial contract is two years but the contract can be renewable for a third year provided that the job candidate performs satisfactorily in the initial contract and third-year funding is approved by the relevant grant agency.

Salary will be competitive and commensurate with the candidate's qualification and relevant experience.

The earliest starting date for the position is April 1, 2020.

Interested applicants should send his/her curriculum vitae with complete contact information and any supporting documents to [bizk@nus.edu.sg](mailto:bizk@nus.edu.sg).

Applications will be accepted until the position is filled.