Facilitate Undergraduate Research with Research Social Network Services

Project Number: 6000201

Principal Investigator: Prof Jian MA

Grant Type: ERG

Abstract:

Undergraduate research is an important part for the university's professional education. Local governments have incentives (e.g. the internship opportunities in Research Funds) to encourage undergraduate research. However the impact is small due to limited funding opportunities and difficulties of recruiting suitable undergraduate candidates for the funded projects. This project aims to develop research social network services (RSNS) to facilitate undergraduate research. Recommendation services will be designed to match suitable candidates for research projects in a research social network environment. Communication and knowledge sharing services will also be implemented for research collaboration among undergraduate students and researchers in their research projects. The proposed RSNSs are implemented as applications of the research social networks, e.g. ScholarMate (http://scholarmate.com) with 500,000 researchers in Hong Kong and the mainland China, and Linkedin (http://linkedin.com) with over 80,000,000 professionals and researchers worldwide.

300 undergraduate students from five participating universities in Hong Kong, Guangzhou and Beijing will be recruited to use RSNSs for their undergraduate research projects. More than half of them are from CityU. Profiles of researchers and undergraduate students will be built so as to make recommendations for them to communicate and collaborate in research projects. Usage data on RSNS will be collected for social network analysis. Questionnaires will also be designed, validated and used to evaluate the effectiveness of the RSNS on collaborative learning and research. Subject groups (i.e. participating students and researchers in their joint projects) will be interviewed so as to collect data on the experiments. These qualitative and quantitative data will be analyzed for publication in internationally refereed journals. Best practices will also be summarized in reports and disseminated in seminars and workshops.