

DEPARTMENT OF EECS
COLLEGE OF ENGINEERING & APPLIED SCIENCE

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE WOMEN

APPLICATION DEADLINE: 03/01/2018

PROJECT TITLE: Networked Requirements Traceability

Nan Niu
Department of EECS, CEAS
832 Rhodes Hall
nan.niu@uc.edu
Phone: 513 556 0051

Project Description

Software requirements traceability refers to the ability to describe and follow the life of a requirement. In modern software development such as agile and open-source projects, requirements are often represented in a lightweight way (e.g., stated as features) and refined continuously. This research project aims to develop a new way of understanding the trace links by leveraging the rich repositories of issues, code commits, and their discussion from the project stakeholders. In particular, a heterogeneous graph of people, artifacts, and tasks will be developed, from which the traceability will be defined. The project is ideally performed by a student who has taken software engineering courses or has gained practical software development experiences. The WISE student will join a team of graduate students in the Software Engineering Research Lab at UC. It is highly likely that the WISE student will also be preparing and submitting manuscripts for publication from the research work on networked requirements traceability.