Program Summary

The primary objective of this program is to motivate undergraduate students to pursue research careers and instill in them the spirit of innovation via intensive summer research projects in software systems and analysis. Software affects nearly every aspect of our lives and holds the key to many scientific and engineering challenges. As software is increasingly pervasive nowadays, software-related problems have become much more prevalent. This project will study new trends in software systems including mobile software systems, green computing, IoT services, big data and parallel systems. The site emphasizes the participation of a diverse group of students, in particular, women, minorities, first generation and non-traditional students.

The students will spend ten weeks in the summer on site working in groups with supervising faculty member on a cutting edge research project. Students will be assigned to an on-campus dormitory for inclusion in a supportive campus community. Students will be closely mentored on research processes, research ethics, advanced technology development and both written and oral presentation skills. They will also participate in practical professional development activities such as workshops for graduate school application and field trips to industrial laboratories and the entrepreneurship forum. The program will also include a fun social event at the crystal-clear San Marcos River.

Mentors and Topics:

Dr. Guowei Yang....Testing and Analysis of Mobile Software Systems
Dr. Anne H.H. Ng...Software Platforms for IoT Software Systems
Dr. Rodion Podorozhny......Verification of Distributed AI Systems
Dr. Apan Qasem...Adaptive Optimization on Extreme-scale Supercomputers
Dr. Kecheng Yang......Scheduling in Compositional Real-Time Systems

Important Dates

Application due ....................... March 8, 2019
Decision notification .................. April 5, 2019
Program begins ........................ June 3, 2019
Program ends ............................ Aug 9, 2019

Who can apply?

• Applicant must be a US Citizen or US Permanent Resident
• Applicant should have at least completed data structures or computer algorithms classes or their equivalence
• Good knowledge of at least one programming language
• Women, minorities, first generation, and two-year college students are encouraged to apply

Benefits

• Stipend: $500 per week
• Travel re-imbursement of up to $600
• Free on-campus housing
• Meal allowance: $120 per week

How to apply?

Review of applications will begin on March 9, 2019 and continue until all positions are filled. Application must be electronically submitted via reussa@txstate.edu with the following required supporting documents:

1. Completed application form. Download the application form from program website. Students should indicate the order of preference of the listed research topics.
2. A most recent, electronic copy of an official transcript, including the courses registered for Spring 2019. A scanned copy of an official transcript is sufficient.
3. One letter of recommendation from a faculty member who can assess your ability to do research.
4. A one-page resume.
5. A 500 words description of career goals including reasons for wanting to do research and participate in this REU program.

Contact:

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For more information, please visit the program website

http://reussa.cs.txstate.edu/

which will be updated as additional information becomes available