

Posted: September 12, 2005

Research Assistant Positions

Computer Science
The University of Texas at El Paso
500 W. University Avenue
El Paso, TX 79968

“Unification of Verification and Validation Methods for Software Systems”

Two NSF-funded RA positions are available immediately to study software specification and verification methods. The aim of this project is to investigate techniques for unifying several different software verification and validation (V&V) methods, including theorem proving, model checking, testing, and runtime monitoring. In particular we will focus on designing a unified property specification language (UPSL) and integrating existing V&V tools through UPSL. Initially, the tools to be integrated include testing tools, runtime assertion checking tools, and performance monitoring tools.

Preference will be given to self-motivated students who are looking for Ph.D. or M.S. research topics and have the following qualifications:

- (1) strong background in formal specification
- (2) knowledge in software and program verification
- (3) knowledge in programming language translation and compilation
- (4) programming experience and skills in Java and C

For one position, preference will be given to Ph.D. students; the other position is open to both Ph.D. and master students. Undergraduate students who plan to go the graduate school at UTEP next semester are also encouraged to apply.

The appointment is initially for one year but can be extended for two more years.

Students will be paid on a salary basis, which includes fringe benefits, and tuition will be supported in part. The salary will depend on the student's experience.

Interested applicants should contact either Dr. Cheon or Dr. Teller (see the contact addresses below). It will be appreciated if the applicants can bring their CV and a preliminary statement of research interests.

Dr. Yoonsik Cheon
Phone: 915-747-8028
Email: cheon@cs.utep.edu

Dr. Pat Teller
Phone: 915-747-5939
Email: pteller@cs.utep.edu