PhD in Software Engineering

WE ARE KNOWN FOR...
- Architecture
- Organizations
- API & Frameworks
- Assurance
- Software Tools
- Analysis
- Requirements
- Configurable Systems
- Security and Privacy
- Mining SW Repositories

PhD students Raykrong Sukkerd, Sudarshan Wadkar, and Daniel Smullen embody the SE PhD’s culture of collaboration as they work together on a modeling problem.

OUR FACULTY

Jonathan Aldrich
Language design, program verification, object-oriented foundations, and enforcement of software design constraints.

Travis Breaux
Requirements engineering, software design assumptions, privacy and security, and policy and legal compliance.

David Garlan
Software architecture, pervasive computing, self-healing systems, and applied formal methods.

Jim Herbsleb
Software teams and orgs, open source ecologies, collaboration, coordination, congruence, global software development.

Eunsuk Kang
Software design, assurance, modeling, verification, security, safety, and cyber-physical systems

Christian Kästner
Variability and reuse, modularity, program analysis, and program comprehension.

Claire Le Goues
Software quality and evolution, defect detection, program analysis, and automatic bug repair.

Heather Miller
Language Design, Distributed Programming, Distributed Runtimes, Data & Consistency

Brad Myers

Bradley Schmerl
Software architecture, self-adaptive systems, software engineering tools.

Bill Scherlis
Software assurance and security, software analysis, safe concurrency, and software development tools.

Mary Shaw
Everyday software, software architecture, ultra-large-scale systems, and appropriate dependability.

Joshua Sunshine
API usability, language design, program comprehension, software development tools, and programmer productivity.

Chris Timperley
Search-Based Software Engineering, Automated Program Repair, Program Analysis, Cyberphysical Systems

Bogdan Vasilescu
Software analytics, social aspects, teams, collaboration, open source ecologies, and "big code"

WHERE ARE OUR GRADS?

TO LEARN MORE OR TO APPLY, VISIT US AT se-phd.isri.cmu.edu