

JML-related Projects at UCSD

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and many others

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MSc Projects at UCED

- during their final semester, students in the Advanced Software Engineering program are required to do an MSc thesis
- students apply to a supervisor and typically pick off of a list of projects
- we have eight students at this moment; several are focusing on JML-related work
- in my first four years here, I had two students; why do we suddenly have eight?

MSc Course

- Dependable Software Engineering—
one week intensive course
- topics covered include formal system analysis,
contract-based design, static analysis tools, unit and
system testing, and verification
- lectures in the mornings;
project work in the afternoon
- their project: analysis, design, implementation,
validation, and verification of a small digital cash system
- system must execute and verify by Friday night

Ongoing Projects

- AutoGrader
- Beetlz and BONc (Simple Model-Implementation Consistency Testing)
- FreeBoogie
- Mobius
 - the Mobius Logging system (aka IDeBug)
 - the ATP plugin
- SenseTile
- Implementing and Verifying the Irish Voting System
- Contracts in OpenBSD
- Maintaining Consistency between Natural Language Specifications and Software Architectures
- A Process for the Specification of Core JDK Classes
- An IDE for BON
- Automatic Refactoring of Java Contracts