PVS for Computer Scientists

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PVS Tutorial 2017

Objective

Provide an introduction to the Prototype Verification System (PVS) with emphasis on algorithm development and verification.

Prerequisites:

- Logic,
- Functional Programming, and
- Emacs.

Program

Time	Lecture	Lecturer
09:00	Welcome	
09:15	Propositional and Predicate logic	MA
10:15	Exercises 1 (PVS theories)	
10:45	Coffee Break	
11:00	Real Number Proving	CM
11:30	Abstract Data Types	MM
12:00	Exercises 2 (PVS theories)	
12:30	Lunch	
14:00	Induction, Recursion, and Iteration	CM
14:30	Animation of Functional Specifications	MM
15:00	Exercises 3 (PVS theories)	
15:45	Coffee Break	
16:00	PVS in Practice **or**	
16:00	Strategies	CM

Further Information

- PVS (http://pvs.csl.sri.com)
- PVS at GitHub (https://github.com/SRI-CSL/PVS)
- NASA PVS Library at GitHub (Development Version) (https://github.com/nasa/pvslib)
- NASA PVS Library at NASA LaRC (http://shemesh.larc.nasa.gov/fm/ftp/larc/PVS-library)
- Emacs Basics (http://doors.stanford.edu/~sr/computing/emacs.html)
- PVS Cheat Sheet (cheatsheet.pdf)