



Be inspired.

Programming Languages and Verification Seminar

Automatic Device Driver Synthesis

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ECOT 831

Friday, December 5, 2014

4:00 p.m. to 5:00 p.m.

Automatic device driver synthesis is a radical approach to creating drivers faster and with fewer defects by generating them automatically based on hardware device specifications. I will present the design and implementation of a new driver synthesis toolkit, called Termite. Termite is the first tool to combine the power of automation with the flexibility of conventional development. It is also the first practical synthesis tool based on abstraction refinement. Finally, it is the first synthesis tool to support automated debugging of input specifications. I will explain the main principles behind the tool and give a brief demo of its capabilities.

Leonid Ryzhyk is a postdoctoral researcher in the Carnegie Mellon University School of Computer Science. Leonid's research focuses on applying rigorous formal techniques to the design, implementation, and verification of operating systems. He received his PhD from the University of New South Wales in 2010. Prior to joining CMU, Leonid worked as a researcher at NICTA and a postdoctoral fellow at the University of Toronto.

Hosted by Pavol Cerny (pavol.cerny@colorado.edu).



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