

Computer Science Seminar Series, 2011

National Capital Region

A Component-Based OS for Predictable and Reliable Embedded Computation

Speaker: Prof. Gabriel Parmer
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Friday, November 4, 2011
1:00PM-2:00PM, NVC 325

Abstract

For the small embedded systems that control our physical world the focus is conventionally on predictable execution – being able to meet the real-time deadlines imposed by the world. In addition to predictability, both reliability and security constraints are increasingly important as more and more functionality is expected from the infrastructure. In this talk, we will discuss our work on the design and implementation of the *Composite* component-based operating system that focuses on providing a configurable system with pervasive fault isolation for dependability and security.

Biography

Gabriel Parmer is an Assistant Professor at the Department of Computer Science at the George Washington University. He received his Ph.D. degree from Boston University in 2009. His research interests include the design and implementation of operating systems for reliability, predictability, and scalable computation. He received the Best Paper Award at the IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS).