



## UMass Lowell Computer Science Colloquium Announcement

**Speaker:** Kipp Bradford, Design Lab Inc, Providence, Rhode Island  
**Date & Time:** Wednesday, Nov. 29, 2006, 3:00pm--4:00pm  
**Place:** Olsen 311, Refreshments are served at 2:30pm

---

### **Inside Santa's Laboratory: What's this DSP Doing In My Elmo? Or, the secrets of rapid product design from toys to medical instruments.**

My practice combines electronics, computer hardware, and software development, all in the context of solving real world problems specifically, toy design and medical devices.

The talk will include lots of examples, including products built with LabVIEW, Easy-format, and a tool called Visual Studio Automation.

The emphasis is rapid product design extremely rapid. In our shop, we develop 50 unique prototypes every year. The design process that is involved includes problem-solving without conventional development tools and approaches. We often don't have a debugger, or have the time for traditional modular decomposition of a design.

This talk is oriented to engineers and academics who think about programming languages, compilers, IDEs, operating systems, and the hardware/software interface.

#### *Bio:*

Kipp Bradford is Vice-President of Engineering at Design Lab and CTO of medical startup Bionica LLC. in Providence, Rhode Island. He has a wide range of experience from artificial intelligence to race car design to biomechanics, in addition to working as a toy inventor for the past decade. He is a 1996 graduate of Brown University, with a Sc.B. and Sc.M. in Bioengineering.