# Emily Dimpfl

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http://emilydimpfl.com/portfolio

## TECHNICAL SKILLS

**Programming:** C, C++, Java
**Scripting:** Visual Basic .NET, Lisp, Lua, Bash
**API:** Qt, .NET, VBv6, NI-DAQmx, Newport Agilis, Aerotech A3200, ASCOM, etc.
**IDE:** Qt Creator, Visual Studio, Eclipse, Xcode
**Version Control:** Subversion, Git, Mercurial

## EDUCATION

**University of California, Irvine**
Masters in Computer Science and Informatics **2010-2013**

**Pepperdine University**
Bachelor of Science in Computer Science and Mathematics **2005-2010**

## ACADEMIC HONORS

**Litton Endowed Scholarship**
Merit Scholarship for Pepperdine University Computer Science and Mathematics Juniors and Seniors, two-time recipient. **2008-2010**

**Outstanding Computer Science Graduate**
Awarded to exceptional Computer Science graduates. Previous recipient graduated in 2003. **2010**

## PUBLICATION

**Automated Generation of Failure Modes and Effects Analysis from AADL Models**

Presented at ISSRE 2011, the 22nd annual International Symposium on Software Reliability Engineering. The paper is available at https://wiki.sei.cmu.edu/.../FSW11Hecht-Apr2012.pdf. **2011**

**The Pep/8 Memory Tracer: Visualizing Activation Records on the Run-Time Stack**

Presented at SIGCSE 2010, the 41st ACM Technical Symposium on Computer Science Education. The paper is available at http://pep8-1.googlecode.com/files/Pep81Paper.pdf. **2010**

## EXPERIENCE

**Associate Technical Staff, The Aerospace Corporation, El Segundo, CA**
Developer for the Remote Sensing department. Wrote applications, libraries, and drivers used in data capture of rocket plumes, telescope, dome control and sensing software, as well as other motor and sensor systems. **2010-Present**

Developer for the Software Analysis department. Wrote applications to assist automated analysis of failure states and effects for software and hardware systems, including analysis for multiple failures and recoveries. **2011**

**Software Developer, Pepperdine University**
Codeveloped Pep/8, an assembler and simulator that simulates assembly and machine code sequences as a teaching tool, available under the GPL at http://pep8-1.googlecode.com. **2009-Present**

Codeveloped Pep8CPU, which simulates microcode sequences in the CISC Pep/8 machine as teaching tool, available under the GPL at http://pep8cpu.googlecode.com. **2010-Present**

**Project Lead, Pepperdine Computer Science Capstone** **2010**
Created Cahoots, an open source, cross-platform real-time collaborative text editor in conjunction with two other seniors, available under the GPL at http://cahootseditor.googlecode.com.

**Graphic Artist, Pepperdine Computer Science Capstone** **2009**
3D modeling and texturing for the Senior capstone project "The Guardians", a Newtonian space simulator.