

Jeffrey Palm

jeff at the following domain
<http://jeffpalm.com>

- Objective** To tackle hard problems requiring an mix of innovation, research, and development; specifically to allow developers to develop more effectively and to make web experiences more fulfilling.
- Education**
- Northeastern University**, Boston, MA Sep 2003 - May 2006
ABD Computer Science (PhD on leave)
Emphasis: Programming Languages/Systems, Aspect-Oriented Programming
- University of Colorado**, Boulder, CO, GPA: 3.91/4.0 Sep 2001-May 2003
M.S. Computer Science
Thesis: On the Relationship Between Object-Oriented Metrics and Software Evolution
- University of Florida**, Gainesville, FL, GPA: 3.89/4.0 Sep 1997-May 2000
B.S. Computer Engineering (with highest honors), Minor in Mathematics
Thesis: A Programming Language and Hybrid Editor Generation System
- Experience**
- Kaletan Technologies**, Las Vegas, NV *Head of Software Dev.* July 2006-present
- Partner in a consulting company working under parent company VisioNET Television Company contracted to build their IP TV network and develop software for it. Among the software was a pure-Java MPEG-4 player running in the J2ME profile.
- Navtones**, Los Angeles, CA *CTO* July 2005-present
- Developed and run technology side of the company Navtones (<http://navtones.com>) that supplies celebrity voices for navigation and GPS units. Contributions include the installation service, financial tracking, and voice delivery. All technology has been acquired by the navigation unit company TomTom to deliver their voice content.
- IBM Research**, Hawthorne, NY *Research Staff* Aug 2004-April 2006
- Working on various aspects of the Concern Manipulation Environment (CME) (<http://eclipse.org/cme>).
 - Mentors: Peri Tarr and Harold Ossher.
- IBM Research**, Hawthorne, NY *Intern* Summer 2004
- Created a general-purpose framework for adding JSR 45 (debugging information) support to Java systems
 - Integrated this support into parts of the CME
 - Added such support to the Jikes and ANTLR parser generators.
 - Added it to the CME with an assembly toolkit based on the Shrike bytecode toolkit, and informant toolkits based on Shrike, EMF, and Microsoft IL assembly.
 - Added it to various components of CME including testing tools, documentation tools, and performance-tuning tools.
 - Mentor: Peri Tarr.
- NASA Ames Research Center**, Mountain View, CA *SSRP Intern* Summer 2003
- Explored, designed, and implemented a language for quantifying events over programs called The Puffin.

- Mentor: Bob Filman.

IBM, Cambridge, MA *Extreme Blue Intern* Summer 2002

- Enhanced the Jikes RVM to run the Java IDE Eclipse.
- Implemented the Java Wire Debugging Protocol.
- Improved the threading and I/O systems, resource management, serialization, and further libraries to comply with the Java 1.4 specification.
- Mentor: Julian Dolby.

Xerox PARC, Palo Alto, CA *Researcher* Aug 2000-Aug 2001

- Developer on the programming language AspectJ.
- Designed and implemented the debugger (cleanroom `jdb`), documentation tool (cleanroom `javadoc`), Jakarta Ant support, and test suite/harness, and build system.
- Worked additionally on the compiler and support for existing products, such as Forte and Netbeans.
- Supervisor: Jim Hugunin.

Xerox PARC, Palo Alto, CA *Intern* Summer 2000

- Explored Aspect-Oriented solutions to software engineering problems, including implementing various tools in AspectJ, such as the debugger.
- Mentor: Crista Lopes.

Selected Projects All projects are available at <http://jeffpalm.com/projects> and various side-projects at <http://jeffpalm.com/code>.

- **uTunes** (<http://jeffpalm.com/utunes/>) An early-stage project to share ipods and itunes libraries across the internet and on multiple machines.
- **Tability** (<http://jeffpalm.com/tabability/>) An early-stage project to automatically generate graphs from HTML tables on both client- and server-side.
- **Kathymaps** (<http://kathymaps.com>) An early-stage project allowing people to collaborately share narratives using Google Maps as a medium. Currently only works under Firefox. (user: `guest`, password: `g00ber`).
- **GeoRSS** (<http://jeffpalm.com/geo>) A very early-stage project to aggregate *geo rss* feeds and allow people to collaborate with other people's feeds.
- **GDirections** (<http://jeffpalm.com/gdirections>) A firefox extension to aid in finding directions to and from selected text using Google Maps.
- **Flickrize** (<http://jeffpalm.com/flicker>) An early-stage project to allow people to integrate different web sites into a single view.
- **JavaPalm** (<http://javapalm.sourceforge.net>) A large suite of Java utilities.
- **DemeterCop** (<http://demetercop.sourceforge.net>) Looking at the effects of violating the Law of Demeter on software quality
- **Ajdoc by Reflection** (<http://reflectajdoc.sourceforge.net>) A compiler extension to the documentation tool `ajdoc` from the AspectJ Project that uses reflection rather than requiring the source code.
- **Harry Legs** (<http://jeffpalm.com/harrylegs>) My undergraduate thesis was a domain-specific programming language generation system.
- **The Puffin** (<http://jeffpalm.com/puffin>) was an aspect-oriented language for quantifying over the events of a program done as NASA Ames Research Center.

- **NetTraversals** (<http://www.ccs.neu.edu/home/jpalm/nettraversals>) .NET implementaton of the Adaptive Programming Library from the Demeter Group.

Skills

Languages: Java, Ruby, Javascript, PHP, Perl, C/C++, Python, Scheme

Misc: build systems, compilers/language implementation, testing, Ajax, web programming, performance-analysis, teaching, debugging, Linux

Papers

All papers are available at <http://jeffpalm.com/papers>.

- Therapon Skotiniotis, Jeffrey Palm, and Karl Lieberherr. *Demeter Interfaces: Adaptive Programming without Surprises*. In European Conference on Object Oriented Programming, volume 4067 of Lecture Notes in Computer Science, pages pp.477-500. Springer-Verlag, 2006.
- David Shepherd, Jeffrey Palm, Lori Pollock and Mark Chu-Carroll. *Timna: A Framework for Automatically Combining Aspect Mining Analyses*. International Conference on Automated Software Engineering. Long Beach, California, USA, November 7-11, 2005.
- Karl J. Lieberherr, Jeffrey Palm, and Ravi Sundaram. Expressiveness and Complexity of Crosscut Languages. Workshop on the Foundations of Aspect Oriented Programming Languages at AOSD 2005, Chicago, IL, USA, 2005.
- Jeffrey Palm and Karl J. Lieberherr. *Improving XPath Evaluation with Strategies*. Technical report, College of Computer and Information Science, Northeastern University, 2005.
- Therapon Skotiniotis, Jeffrey Palm, and Karl Lieberherr. *Demeter Interfaces: Adaptive programming without surprises*. Technical report, College of Computer and Information Science, Northeastern University, 2005. [jbr/i](#)
- D. Shepherd, J. Palm and L. Pollock. *Fast Prototyping and Evaluation of Aspect Mining Analyses via Timna*. Workshop on Aspect Reverse Engineering, Delft University of Technology, the Netherlands, November, 2004.
- David Shepherd, Jeffrey Palm and Lori Pollock. *Fast Prototyping and Evaluation of Aspect Mining Analyses via Timna*. Workshop on Aspect Reverse Engineering, Delft University of Technology, the Netherlands, November, 2004.
- J. Palm, K. Anderson, and K. Lieberherr. *Investigating the Relationship Between Violations of the Law of Demeter and Software Maintainability*. Workshop on Software-engineering Properties of Languages for Aspect Technologies, AOSD, Boston, MA, 2003.
- J. Palm, H. Lee, A. Diwan, and J. E. B. Moss. *When to use a compilation service*. Lightweight Compilers and Tools for Embedded Systems, Berlin, Germany, 2002.
- G. Kiczales, E. Hilsdale, J. Hugunin, M. Kersten, J. Palm, and W. Griswold. *Getting Started with AspectJ*. October 2001 Communications of the ACM.
- G. Kiczales, E. Hilsdale, J. Hugunin, M. Kersten, J. Palm, and W. Griswold. *An Overview of AspectJ*. Proceedings of the 15th European Conference on Object-Oriented Program ming, Budapest, Hungary, June, 2001.
- E. Hilsdale, J. Hugunin, M. Kersten, G. Kiczales, C. Lopes, J. Palm. *AspectJ: the language and support tools*. Addendum to the 2000 proceedings of OOPSLA 2000.
- Jeffrey Palm. *A Programming Language and Hybrid Editor Generator*. Highest Honors Thesis. Department of Computer Science and

**Academic
Experience**

Northeastern Univ., *Teaching Assistant* Jan 2006-May 2006
Assisted in teaching CSU213, Introduction to Computing II. Instructor: Viera Proulx.

Northeastern Univ., *Instructor* Jan 2005-May 2005
Instructed CSU211, Introduction to Computing. Organized and taught a class of approximately 25 students; managed two teaching assistants.

Northeastern Univ., *Teaching Assistant* Sep 2004-Dec 2004
Assisted in teaching CSU211, Introduction to Computing, by holding lab sessions, office hours, grading work, and helping create assignments and tests. Instructor: Matthias Felleisen.

Northeastern Univ., *Teaching Assistant* Sep 2003-Dec 2003
Assisted in teaching CSU211, Introduction to Computing, by holding lab sessions, office hours, grading work, and helping create assignments and tests. Instructor: Matthias Felleisen.

Univ. of Colorado, *Teaching Assistant* Aug 2002-Dec 2002
Assisted in teaching CSCI 3155 – Programming Languages by holding recitation sessions, office hours, grading homework, and helping create assignments. Instructor: Martin Hirzel.

Univ. of Colorado, *Research Assistant* Aug 2001-May 2002
Explored energy-efficient compilation techniques over a network by carrying out compilation tasks remotely. Published in LCTES 2002, Berlin, Germany. Advisor: Amer Diwan.

Univ. of Florida, *Teaching Assistant* Jan 2000-May 2000
Assisted in teaching COP 5555 -Graduate Programming Languages, by holding office hours and grading homework and tests. Instructor: Beverly Sanders.

Univ. of Florida, *Research Assistant* May 1999-May 2000
Designed and implemented a programming language and hybrid editor generator in C++, Perl, and Tcl while working with the Adaptive Image Manager team. Used this system to generate a language for the Image Algebra, helping to quickly evaluate network configurations while prototyping image manipulation algorithms. Mentor: Joe Wilson.

Outside interests Snowboarding, mountaineering, marathons (OK, I've only run Boston, but plan more), guitar and anything involving music.

References Available upon request.