Karl Voelker

Sunnyvale, California

ktvoelker@gmail.com
http://karlv.net

Employment

Software Development Engineer, Lab126, Cupertino, CA   Aug. 2011–Present
- *Tech lead*, Kindle Fire web application platform, since Oct. 2012
  - Provided technical leadership to a team of four engineers
  - Designed and implemented a new application platform
  - Worked with customers, architects, and product managers on requirements and design
  - Shipped two major releases
- Kindle e-reader platform generalist, Aug. 2011–Sep. 2012
  - Shipped Kindle Touch and Kindle Paperwhite
  - Proposed and implemented UI overhaul for Paperwhite release
  - Designed and implemented additions to UI platform API
  - Worked on everything: boot sequence, network configuration, system toolbars, window layout
  - Created a UI interaction-testing framework

Research Assistant, UW–Madison, Madison, WI   Aug. 2010–Aug. 2011

Software Engineer Intern, Microsoft, Redmond, WA   May 2009–Aug. 2009

Software Engineering Intern, Truviso, Foster City, CA   May 2008–Aug. 2008

Education

University of Wisconsin–Madison, Madison, WI, Fall 2010–Summer 2011
Graduate student in the Dept. of Computer Sciences, programming languages group

Rochester Institute of Technology, Rochester, NY, Fall 2005–Summer 2010
Graduated Summer 2010 with **M.S. and B.S. in Computer Science**
GPA 3.97; enrolled in Honors Program; National Merit Scholar
M.S. Thesis: "Practical Programming with Total Functions" (http://pptf.karlv.net)
Courses: algorithms, C.S. theory, cryptography, parallel computing, compilers

Skills

C, C++, Java, Scala, Haskell, Python, Perl, JavaScript, SQL, Android, Linux

Projects

Splitcent, a bill tracker for debts between friends
- Implemented in Python with Flask and PostgreSQL
- Created the database schema and web service API
- Live for over a year

Vorple, a simple web service framework for Haskell
- Allows a web service to use Haskell's rich type system
- Plays nice with other libraries via widely-used monadic interfaces
- https://github.com/ktvoelker/vorple

Argon, a declarative X11 window manager in Haskell
- Self-taught using X11 manual and other WM source code
- http://argon.karlv.net