

## Karl Voelker

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http://karlv.net

## Employment

**Software Development Engineer II**, Lab126, Cupertino, CA    Oct. 2012–Present

- *Tech lead*, Kindle Fire web application platform
- Provided technical leadership to a team of four engineers
- Designed and implemented a new application platform
- Worked with customers, architects, and managers on requirements and design
- Shipped two major releases

**Software Development Engineer**, Lab126, Cupertino, CA   Aug. 2011–Sep. 2012

- Kindle e-reader platform generalist
- Shipped Kindle Touch and Kindle Paperwhite
- Proposed and implemented UI overhaul for Paperwhite release
- Designed and implemented additions to UI platform API
- Worked on boot, wifi configuration, system toolbars, and 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>