

Karl Voelker

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<http://karlv.net>

Employment	Software Development Engineer , Lab126, Cupertino, CA	Aug. 2011–Present
	<i>Tech lead</i> , Kindle Fire web application platform, since Oct. 2012 <ul style="list-style-type: none">▪ 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 <ul style="list-style-type: none">▪ 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
	<ul style="list-style-type: none">▪ Worked on system for checking safety properties of JavaScript programs▪ Experience in absorbing academic literature and conference presentations	
	Software Engineer Intern , Microsoft, Redmond, WA	May 2009–Aug. 2009
	<ul style="list-style-type: none">▪ Performance testing and debugging on certain Windows components	
	Software Engineering Intern , Truviso, Foster City, CA	May 2008–Aug. 2008
Education	<ul style="list-style-type: none">▪ Designed, developed, and tested a new feature on Truviso's flagship application▪ Worked with the PostgreSQL database source code	
	University of Wisconsin–Madison , Madison, WI	Fall 2010–Summer 2011
	Graduate student in the Dept. of Computer Science, programming languages group	
	Rochester Institute of Technology , Rochester, NY	Fall 2005–Summer 2010
	Graduated with M.S. and B.S. in Computer Science GPA 3.97; enrolled in Honors Program; National Merit Scholar M.S. Thesis: <i>Practical Programming with Total Functions</i> (http://pptf.karlv.net) Courses: C.S. theory, algorithms, cryptography, parallel computing, compilers	
Skills	C, C++, Java, Scala, Haskell, Python, Perl, JavaScript, HTML, CSS, SQL, Android, Linux	
Projects	<i>Splitcent</i>, a bill tracker for debts between friends <ul style="list-style-type: none">▪ Implemented in Python with Flask and PostgreSQL▪ Created the database schema and web service API▪ In stable operation for over a year	
	Continuous compilation daemon for Haskell with vim integration <ul style="list-style-type: none">▪ https://github.com/ktvoelker/HsTools	
	<i>Vorple</i>, a simple web service framework for Haskell <ul style="list-style-type: none">▪ 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	
	<i>Argon</i>, a declarative X11 window manager in Haskell <ul style="list-style-type: none">▪ Self-taught using X11 manual and other WM source code▪ http://argon.karlv.net	