

# James S. Ravn

*Education:* B.S. Computer Science and Engineering. University of California, Los Angeles (2005). 3.5 GPA.  
Graduate computer science classes at DePaul University (5 classes, 2006-2008). 4.0 GPA.

## Skills Overview

- Programming: C, Ruby, Java
- Technologies: Ruby on Rails, ASP, AJAX, CSS, Databases, SQL, REST, Concurrency
- Practices: Test and behavior driven development, Version control, Design patterns, UML
- Additional: Data mining and analysis, Discrete event simulation, Monte Carlo

## Experience

Senior Software Engineer, Motorola Mobile Devices (Libertyville, IL)

Jan. 2006 - Current

- Rated in the top 10% of the company in my annual performance review. Received a fast promotion to Senior Software Engineer after 10 months with the company, a position typically reserved for someone with 2-3 years of experience.
- Created a web tool to automate the approval process for terminating and duplicating software defects. Worked closely with my customers and used an iterative style of development, releasing changes early and often. (Ruby on Rails)
- Created a defect tracking tool to work with a legacy database missing key metrics. Created a RESTful web front end, allowing data to be accessed in many formats in a standard way. (ASP, Ruby on Rails)
- Adapted a single file ASP tool into a web suite of data mining tools organized by the Model-View-Controller design pattern. These tools use sophisticated SQL queries for legacy databases and produce Excel files with charts and data. (ASP)
- Created an automated web based system for managing defect backlog plans. It is used successfully on our Linux/Java and 3G cell phones. (ASP)
- Co-designed and implemented several Excel tools for software defect and ship date estimation that have been used successfully on our Linux/Java and 3G cell phones. Learned many statistical techniques in a short time frame, including regression analysis, queuing theory and Markov chains. (Excel, Minitab)
- Created many Python & Ruby scripts for use by team members to automate data mining tasks. Created batch files to automate the deployment of Ruby on Rails websites to an IIS/Windows Server. (Python, Ruby, MS Batch)
- Co-led improvement projects for user trials and formal testing.
- Data mining and analysis of various data sources to support data driven decisions by product managers. Data sources include Oracle, MySQL, MS SQL, ldap, ClearDDTS, and HTML scraping.

Software Engineer, Signal Transport (Irvine, CA)

Sept. 2005 - Jan. 2006

- Designed and implemented a public website for a new product line. (Ruby on Rails)

## Extra-curricular

- Added support for the Linux kernel RTC in an open source Quakeworld client. (C)
- Co-creator of the Autocomplete Manager, a Firefox addon with 100,000+ downloads. (Javascript, XUL)
- Implemented zlib compression of a telnet stream for an open source MUD, following the MCCP protocol. (C)
- Implemented database support using the MySQL C library, replacing the legacy flat file system for an open source MUD. (C)
- Created a simple RISC CPU on a Xilinx FPGA and developed several assembly programs for it, such as quick sort. (Assembly)
- Created a compiler for a mini Java language using JavaCC, involving language translation steps and grammars. (Java)
- Implemented a Blackjack AI program using temporal difference backpropagation learning on a neural net. (Ruby)
- Created an open source monte carlo/discrete event simulation library. (C, Java)