Viktor Stanchev

3B Software Engineering
University of Waterloo

Student ID: 20344377
Email: me@viktorstanchev.com

Blog: viktorstanchev.com
Phone: (226) 789-5932

Work Experience

LinkedIn - Software Engineer   Summer 2013

- Designed and developed a distributed system for monitoring the performance of LinkedIn's graph database (which gets on the order of 100,000 qps)
- Designed and developed a front-end for displaying metrics collected with the new system
- Built a foosball / ping pong ladder that uses PageRank to rank players (as a hackathon project)
- Technologies: Java, Scala, gradle, Norbert, JavaScript, node.js, Play framework, backbone.js, d3.js, etc.

LinkedIn - Software Engineer   Fall 2012

- Developed a system for monitoring front-end performance throughout all of linkedin.com
- Worked at all levels: front-end JavaScript to Hadoop data analytics and data visualization
- Technologies: Java, JavaScript, Hadoop, Kafka, Teradata, Node.js, SQL, dustjs, InGraphs, Red Hat Linux, etc.

Tagged - Software Engineer   Winter 2012

- Implemented a machine learning algorithm for spam detection
- Source paper: *F. Qian, A. Pathak, Y.C. Hu, Z.M. Mao, and Y. Xie, "A case for unsupervised-learning-based spam filtering"*
- Technologies: Java, Scala, JavaScript, Spring, Ubuntu, etc.

SpeechBobble - Web Application Developer   Summer 2011

- Front-end and back-end development
- Found and fixed half of the top 10 OWASP 2010 issues
- Technologies: Java, JavaScript, MySQL, FogBugz, JBoss, Tomcat, etc.

Enomaly (acquired by Virtustream) - Drupal Developer   Fall 2010

- Developed and improved custom modules for Drupal 6, designed database tables, etc.
- Technologies: PHP, Apache, JavaScript, MySQL, Trac, SVN, AJAX, jQuery, CSS, GIMP, Ubuntu, Tomcat, Solr, etc.

Projects

Recent adventures / **Conversation starters:**

- Peer to peer social network with end-to-end encryption and no third parties
- Multiplayer, online Conway's Game of Life

Network Code Module   2013

- Built a kernel module for RT linux that implements Sebastian Fishmeister's language for real time network schedules
- Source paper: *Fischmeister, Oleg Sokolsky and Insup Lee, "Network-Code Machine: Programmable Real-Time Communication Schedules Sebastian"*
- Technologies: Arch Linux, C, Python, bash, HTML, Bootstrap, JavaScript, CSS

WatTools   2011

- Crowd sourced repository of useful tools for Waterloo students with a custom GUI for editing
- Technologies: PHP, JavaScript, mustache, backbone.js, jQuery plugins

Co-op map   2009 - 2010

- Facebook application for Waterloo students to share their co-op placements on a map
- Technologies: PHP, HTML, CSS, MySQL, JavaScript, Google Maps API, Facebook API

CaptionSearch   2007 - 2009

- Website for sharing funny or interesting images with ~1000 visitors per day.
- Image uploading, multiple user tiers, automatic promotion of users, content categorization and filtering
- Technologies: PHP, HTML, CSS, MySQL

Education

Candidate for Bachelor of Software Engineering - University of Waterloo, Waterloo, ON, Canada
- Cumulative Average ~85%   2009 - present

International Baccalaureate and OSSD - Weston Collegiate Institute, Toronto, ON, Canada
                                                                                        2005 - 2009

Interests

Software architecture, operating systems, security, social networks, genetic algorithms, machine learning, reverse engineering, social justice, privacy

Misc. Skills

- Programming (descending, by skill / experience): JavaScript, Python, Scala, C++, C, Java, PHP, C#, Haskell
- Security: ~~Crime~~ Spam fighting, web applications, social networks
- Hackathon veteran: 2x Node.js Knockout, 2x Facebook, Tagged, 5x LinkedIn, Papaya Mobile, Kik
- Web technologies: node.js, HTML, CSS, JavaScript (jQuery, mustache, bootstrap, backbone, etc.), single page apps, content management systems (Drupal and custom ones)
- Hardware: Can use oscilloscope, multimeter, soldering iron, bread boards, FPGAs, microcontrollers
- Academic exposure to MATLAB, FPGAs, digital and analog circuits, computer architecture, ADC/DAC, and 68k and MIPS assembly
- MySQL, Apache, Git, SVN, redis, MongoDB, Android