Viktor Stanchev

3B Software engineering
University of Waterloo

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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 frontend performance throughout all of linkedin.com
  - Worked at all levels: frontend 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
  - Frontend and backend 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:
  - Secure peer to peer social network with no third parties
  - Multiplayer, online Conway's Game of Life
- Network Code Module   Winter 2013
  - 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
        2009 - present

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

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

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
- Misc: MySQL, Apache, Git, SVN, redis, MongoDB, Android