Viktor Stanchev

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Work experience

Square - Software Engineer Fall 2014

- Automated vulnerability scanning and handling of newly discovered vulnerabilities
- Improved intrusion detection systems
- Discovered and fixed vulnerabilities
- Designed and built a simple system for issuing TLS certificates
- Technologies: Ruby, Rails, SQLite, Nessus, OS X, Linux, etc.

Mozilla - Software Engineering Intern Winter 2014

- Improved (performance, features) the Gecko Profiler and Cleopatra (frontend to the profiler)
- Added profiling capabilities to Talos (an automated performance testing framework)
- Technologies: C++, FirefoxOS, Python, JavaScript, HTML, CSS, etc.

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 which 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 (renamed to SociaLabra) - Web Application Developer Summer 2011

- Built front-end features in a private social network
- Found and fixed half of the top 10 OWASP 2010 risks
- Technologies: Java, JavaScript, MySQL, FogBugz, JBoss, Tomcat, etc.

Enomaly (acquired by Virtustream) - Web Application 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

Open source Bitcoin exchange: http://txbits.org 2014

- Designed, built, deployed and maintained a Bitcoin exchange
- Technologies: Scala, Play!, [web stuff], postgresql, ansible, logstash, elasticsearch, kibana, bitcoind, litecoind, nginx, memcached, spiped, runit

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*"
- 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

Education

Candidate for Bachelor of Software Engineering 2009 - present

- University of Waterloo, Waterloo, ON, Canada
- Cumulative Average ~85%

Interests

End-to-end encryption, P2P, operating systems, network security, man in the middle attacks, social networks, privacy, reverse engineering

Things not listed above

- Programming languages descending, by skill / experience: Scala, JavaScript, Python, Ruby, C++, C, Java, PHP, C#, Haskell
- Other: Linux, Android, Git, SVN, Mercurial, various security tools