

Nicholas A. Vargish

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Summary: Software architect with deep expertise in designing and implementing application, security, and systems software. Proficient with a broad array of programming and markup languages, data platforms, operating systems, and development environments. High-performing individual contributor who works well as either a team leader or member. Excellent verbal and written communications skills.

Employment History

Senior Software Engineer; January 2018 – present; ProObject; Hanover, MD

On contract to Closures Digital Media Bridge, a company specializing in digital signage. Develop new features for the Hughes Digital Media signage application, which runs on Windows, OS X, and LG SmartTV platforms. The primary development language is JavaScript, with content management infrastructure implemented in Ruby on some platforms. Additional responsibilities include troubleshooting a complex and interdependent codebase, and documenting changes. A grasp of real-time behavior and an appreciation of asynchronous application development are key skills in this development environment.

Software Engineer IV; July 2013 – November 2017; Cisco (previously Sourcefire); Fulton, MD

Research, design, and develop granular system monitoring software including access to internal counters in network monitoring product. Design and document graphical interface to system statistics using Javascript API. Perform comparative evaluation of Hadoop-based big data platform offerings, deep involvement in product qualification and selection process. Design and implement Clojure-based API for domain-specific interaction with Hortonworks Ambari, a management framework for Hadoop clusters. Write and test automated deployment processes for Hadoop cluster nodes using a selection of tool-appropriate implementation languages. Co-design and implement integration of Hadoop-based data handling components into existing firewall and network sensor product line. Perform Scrum Master duties during a period of institutional transition to an Agile development model, exercising verbal communication and negotiation skills as well as light team management roles. Bug fix and customer issue resolution duties as required.

IT Specialist; December 2002 – June 2013; US Government Printing Office; Washington, DC

Develop and maintain applications as a member of the Graphic Systems Development Division. Architect and implement browser-based SQL-backed applications using web application frameworks, including an incident-reporting application, a stock tracking and ordering application, and a role-based authentication system. Develop business process models to represent production tasks and implement them in process modelling software, towards the development of a site-wide manufacturing workflow system. Significant projects include the introduction of Subversion-based revision control and the development of a browser-based front-end for repository and user management; and the transparent integration of bar-coding software into the mailing workflow that is saving the GPO many thousands of dollars per year in mailing costs. Also provide technical expertise for units working with full text indexing software. Understanding of XML, SGML, Perl and a general knowledge of Web-based services, CGI form processing, and related technologies has proven essential. Communication skills, adaptability, and willingness to self-motivate are additional aspects of this position.

Senior Software Engineer; December 1999 -- September 2002; NFR Security, Inc.; Rockville, Maryland

Design and develop security software for NFR Security, a leading provider of intrusion detection systems. Projects include architecting and writing the core software for the Secure Log Repository appliance, a Unix-based syslog and event log aggregator, as well as managing the team of developers that brought the final

product to market. Performed lead engineer role on Unix side of a host based intrusion project, including APIs for core functionality, XML document type definitions describing the data the system would handle, and interfaces to existing product lines. Develop SQL database back-end for packet and other sensor data in PostgreSQL on Unix platforms, including Solaris and Linux. Replace DES with AES in various communication components, write installation and configuration scripts for many Unix products.

Applicable Skills

<i>Programming Languages</i>	Clojure; C; C++; Python; Ruby; Perl; PHP; Java; JavaScript; sh; Tcl and Tk; Lisp; Scheme; Smalltalk; FORTH; various BASIC dialects; Pascal; some Intel and Motorola assemblers.
<i>Databases and Data Platforms</i>	Hadoop and components; HDFS; MapReduce; YARN; Hive; Storm; Kafka; Spark; Hortonworks Data Platform; Ambari; MongoDB; PostgreSQL; MySQL; Oracle; Informix SQL; SQLite; Various SQL access libraries.
<i>Applications and Tools</i>	Eclipse; LibreOffice; awk, sed and the usual Unix tools; Google Apps; MS Office; Visio; OmniGraffle; various Windows and Macintosh applications; Git; Subversion; CVS; make; Jenkins; JIRA; Target Process.
<i>Markup and Publishing</i>	Web2Py; Ruby on Rails; Web application frameworks; XML; XSLT; SGML; HTML (including CGI and forms); TeX and LaTeX; nroff and variants; OmniMark; Emacs and/or vi.
<i>Operating Systems</i>	Linux; Apple Mac OS X; BSD variants; X Windows and many window managers; Bourne shell (including ksh, bash, zsh); C shell (including tcsh); Solaris; Apple Mac OS 9 and earlier; MS Windows.
<i>Network and System Services</i>	Docker; VMware ESXi; KVM and QEMU virtualization; sendmail; Apache httpd configuration; Usenet news; various Unix backup strategies; ftp administration; TCP/IP network and host configuration; System V and BSD print serving; care and feeding of cron; NFS administration; DNS/BIND configuration.
<i>Security Systems and Tools</i>	various security tools such as TCP Wrappers, Crack, and tripwire; Cisco/Sourcefire intrusion detection products; PGP (various flavors); ssh installation and configuration; packet capture and decode utilities; familiar with cryptographic theory and protocols, some implementations.
<i>Hardware Experience</i>	Intel/AMD PC hardware; Cisco UCS servers; Sun Sparcstations and Sparcservers; Apple notebooks and desktops; Cisco routers and firewalls.

Educational Background

University of Maryland
College Park, Maryland
BA Philosophy

U.S. Citizen

References Available

