David W Millar

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Summary

Seasoned software engineer with insatiable technolust. Eager to crush complexity with elegant design. Well versed in OOA/D, web application architecture and infrastructure, security, the java ecosystem, networks, SOA and Integration systems. Experience supporting the full systems development life-cycle and integration of production enterprise applications, public facing multitenant cloud applications, research oriented projects, and open source projects. Invested in agile practices, continuous process improvement, automation, and DevOps.

Experience

Senior Software Engineer   Sept 2012 – Present
IBM Smarter Workforce
Wayne, PA

- Designed, developed, and maintained core infrastructure, including SSO and other centralized auth related responsibilities.
- Mentored juniors, seniors, and directors across departments including qa, software engineering, and database administration on topics such as automated functional web testing, behavior driven and test driven development, automated database change management solutions. Presented to cross functional teams on pragmatic DevOps, technical debt and refactoring.

Senior Software Engineer   March 2012 – July 2012
Software Engineer Contractor   Dec 2011 – March 2012
MDconnectME Inc
Philadelphia , PA

- Worked in a senior capacity on planning, design, requirements, developing and maintaining infrastructure for the MDconnectME application: a public web-facing JEE/Spring/Hibernate/Jsp/jQuery based application.
- Many hats were worn: data architecture, persistence, security, UX, etc. Major focus on simplicity, scalability, cross-browser support, and HIPAA compliance.
- Designed, developed, and maintained back-end messaging systems and infrastructure using Amazon EC2 for SMS and e-mail.

Software Engineer   June 2011 – March 2012
Yellowbook Inc
King of Prussia, PA

- Developed and maintained software systems to manage Yellowbook's repository of digital business listings, advertisements, and related artifacts along with a web application for data management. Interfaced with several other systems including the CDN, artwork workflow, search, web, in-house ratings and review system, and billing.
- Ported some ETL applications from C# to Java, managed an off-shore development team of three, and decreased chaos by leveraging PM tools.
- Experimented with Behavior-Driven Development in order to allow business analysts to write unit tests in plain english.

Research Engineer   November 2008 – April 2011
Drexel University ACIN Center
Camden, NJ
- Managed and oversaw the completion of several projects under contract with the DoD and assisted in writing proposals to acquire multi-million dollar contracts.
- Researched, developed, and analyzed reliable group messaging systems on resource constrained networks using best of breed network emulation tools to investigate things like proactive vs reactive and hybrid service discovery approaches. Won a research award from the Naval Research Labs for a paper that analyzed the performance of one system, which is now on the fast track to deployment in the field.
- Participated in live Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C^4ISR) exercises with domestic forces. Supported coalition experiments with the German and French governments.

Software Engineer   September 2003 – November 2008
Resource Utilization and Management Group
Comcast, Mount Laurel, NJ
- Developed reporting and visualization software for IP address utilization. Used for daily operations and for reporting to ARIN to acquire more address space. (perl, gd, mysql, php, apache httpd)
- Worked with consultants to develop and optimize an IP Address Management system supporting over 2,000 users and hosting information for Comcast's national infrastructure and millions of customers.
- Developed software to mass import network addressing information from acquisitions.

Education   *Bachelor of Science*, Computer Science
Drexel University, Philadelphia, PA
Concentrations: Data Structures and Algorithms and Operating Systems

Computer Skills

Operating Systems: Linux, OS X, Windows, Various Unix, Android

Languages: Groovy, Java, Ruby, Python, SQL dialects, LaTeX, various scripting, markup, and templating. Capable of learning new languages.

CASE Tools: Intellij IDEA, Eclipse, gradle, maven, ant, svn, mercurial, jenkins/hudson, artifactory, redmine

Frameworks: Grails, Rails, Geb, Spock, angularjs, jQuery, Spring, Hibernate, various web, testing, and AJAX frameworks

Other: vim, apache httpd, various application servers, JMS/AMQP, Amazon AWS/EC2, wireshark, nmap, metasploit, XMPP

Publications   "Net-Centric Information and Knowledge Management and Dissemination for Data-to-Decision C2 Applications using Intelligent Agents and Service-Oriented Architectures." I. Mayk, W. Regli, D. Nguyen, et al., Proceedings of the 2011 Military Communications Conference, Baltimore, MD, 2011.

"An Evaluation of Serverless Group Chat" Robert N. Lass, Duc N. Nguyen, Willam C. Regli. Military Communications. 7 November – 10 November 2011, Baltimore, MD

"Client/Server Messaging Protocols in Serverless Environments." Justin Dean, Andrew Harrison, Robert N. Lass, Joe Macker, David Millar and Ian Taylor. Journal of Network and Computer Applications, 2011

"XO: XMPP Overlay Service for Distributed Chat." Robert N. Lass, Joseph P. Macker, David Millar, Willam C. Regli, Ian Taylor. Military Communications. 31 October – 3 November 2010, San Jose, CA

"GUMP: Adapting Client/Server Messaging Protocols into Peer-to-Peer Serverless Environments." Robert N. Lass, Joe Macker, David Millar and Ian Taylor Bio-Inspired Algorithms for Distributed Systems 2010 , 7–11 June 2010, Washington, D.C.

Professional Organizations	*Association for Computing Machinery (ACM)* Member since 2012 *Electronic Frontier Foundation (EFF)* Gold Member since 2011 *Upsilon Pi Epsilon* International Honor Society for the Computing and Information Disciplines
Awards And Honors	*Alan Berman Research Publication Award* Naval Research Labs, 2012
Current Interests	High Signal-To-Noise Ratio Development: convention over configuration, domain-specific languages, expressive and literate programming. DevOps, build/test/release/deployment automation, and configuration management. General hackery.