David W Millar

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Summary

Well rounded, pragmatic software craftsman with experience ranging from small startups and research groups, to large enterprises including Comcast and IBM. Passionate about delivering high-quality software that is a pleasure to work with.

Open source enthusiast, and active member of the *Groovy* community. Contributor to the *Spock* specification and testing framework, and currently serving as technical reviewer for the upcoming second edition of the book *Groovy for Domain-Specific Languages.*

I thrive in an environment where I can work with cross-functional teams, and where coworkers are eager to learn and share.

Experience

IBM Smarter Workforce (Formerly Kenexa Inc.) — WAYNE, PENNSYLVANIA

Senior Software Engineer, IBM Kenexa Enterprise Team — *September 2012 – present*

This team was chartered to develop core enterprise infrastructure and to set the way forward for the company's various talent management offerings. Developed a flexible multi-tenant SSO, correspondence, and client/user/subscription management solution, implemented as a set of RESTful services that combined OAuth, SAML, and IBM's directory integration platform.

As the resident DevOps evangelist, I helped the hosting team write Puppet manifests to automate infrastructure deployments, used Vagrant, Veewee, Virtualbox, and Puppet to provide portable development environments for developers. Worked with the SCM group on taking steps towards Continuous Deployment by setting up a CD pipeline in Jenkins, and helping with deployment scripts. Worked very closely with QA and other development teams, mentoring them on the Groovy language, the Spock testing framework, BDD with Cucumber, and functional web testing with Geb and Selenium Grid; the testing stack that the company ultimately adopted. Worked with the DBAs to reduce ad-hoc chaos by introducing and adopting database migration tools (Liquibase).

MDconnectME Inc (Startup) — PHILADELPHIA, PA

Software Engineer (Contractor) — *December 2011 – March 2012*

Senior Software Engineer — *March 2012 – July 2012*

Worked in a senior capacity on planning, design, requirements and maintaining infrastructure from the ground up for the *MDconnectME* web application, which provides near real-time updates to families and friends during medical operations. The application was featured in the New York Times, Fox Business, MSN News, and various local media outlets. Technologies included AWS, apache httpd and friends, JEE, Spring, Hibernate, JSP, jQuery, Modernizr, and similar frameworks. Developed and maintained back-end messaging systems and infrastructure using Amazon EC2 and Twillio for SMS and e-mail, and was lead on security.

Yellowbook Inc — KING OF PRUSSIA, PA

Software Engineer — *June 2011 – March 2012*

Developed and maintained software systems to manage Yellowbook's repository of digital business listings, advertisements, and related artifacts. Introduced and led the adoption of Behavior-Driven Development and testing tools, including Mockito and JBehave, which ultimately allowed the business analysts to write tests. Ported a set of ETL applications from C# to Java to manage data feeds to third parties, including Google, Citygrid, and TomTom.

Drexel University, ACIN Center — CAMDEN, NJ

Research Engineer — *November 2008 – April 2011*

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 for resource constrained networks using best of breed network emulation tools. Research areas included proactive vs reactive and hybrid service discovery approaches, and translating client/server software to use a peer-to-peer paradigm. Participated in live Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C^4ISR) exercises with domestic, French, and German forces.

Comcast   MOUNT LAUREL, NJ
Software Engineer   *September 2003 – November 2008*
Developed rudimentary reporting, visualization, and integration layer for IP address utilization and management. Used for daily operations and to automate ARIN report generation to satisfy requirements for acquiring more address space (Perl, MySql, Php, JMS, JEE, Spring, SOAP, Struts, Velocity). Worked with consultants to develop and optimize a more industrial-strength IP Address Management System that hosted information for Comcast's national infrastructure and millions of customers. Developed a software platform to import network addressing information from acquisitions.

Education

Drexel University   PHILADELPHIA, PA
Bachelor degree in Computer Science   *2002 – 2007*
Concentrations: Data Structures and Algorithms and Operating Systems

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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

Awards and Honors

• *Alan Berman Research Publication Award*, Naval Research Labs, 2012
• *Upsilon Pi Epsilon*, International Honor Society for the Computing and Information Disciplines

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Skills

Technical expertise: Agile methodologies (scrum, kanban). (A)TDD and BDD. Continuous Integration and Deployment (Jenkins, capistrano, etc). Refactoring. Distributed systems, SOA, integration, RESTful architecture. Relational databases, ORM tools, solid understanding of the NoSql ecosystem. Java, Groovy, Ruby, various scripting, markup, and templating laguages. Capable of learning new languages. Solid understanding of web technologies (HTML, JavaScript, CSS, LESS, AngularJS, Grails, Rails, Dropwizard). Vim. Linux administration, infrastructure automation and virtualization (Puppet, Vagrant, Veewee, Virtualbox, Docker). Build and test automation (Gradle, Geb, Spock, Cucumber, Selenium and friends).

Current Interests

In no particular order: General hackery, the recent explosion of DevOps and infrastructure automation tools, domain-specific languages and language construction in general, emergent design and architecture in software, project scaffolding tools, tabletop games, live music. Currently getting familiar with Scala and Python.