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 both a pleasure to to develop and use.

Open source enthusiast, and active member of the *Groovy* community. Contributor to the *Spock* and *Geb* specification and testing frameworks. Recently worked as technical editor for the book *Groovy for Domain-Specific Languages* 2nd edition.

I value simplicity and elegance. I work best as part of a cross-functional team, and feel equally comfortable in development, operations, or QA roles, and tend to enjoy working at the intersection of these.

Experience

The National Board of Medical Examiners (NMBE)
PHILADELPHIA, PENNSYLVANIA

Contract Full Stack Developer, Backfill for Engineer on Maternity Leave   *April 2017 – October 2017*

Worked on a project called LionsGate, that served to migrate NBME's exam content from their existing, in-house content repository (Adobe CRX), to Surpass, a more modern hosted solution.

The tool provided an Angular 4 and Java web application that allowed exam content owners and authors to have fine-grained control over the migration process.

The domain model was particularly challenging here, as it was large and very intricate.

Most of the work involved pulling exam content and metadata from various services (oracle db, JCR), managing the migration lifecycle, and transforming the data so that it could be pushed to Surpass via their RESTful API.

Technologies included Java, Typescript, Angular 4, Bootstrap, Spring (boot, data, web, etc).

Reed Elsevier, ClinicalKey
PHILADELPHIA, PENNSYLVANIA

Senior Software Engineer, ClinicalKey Platform Delivery Team   *April 2014 – September 2015*

Developed the ClinicalKey backend API. The API integrated several services including authentication, authorization, search, and content, in order to serve content to the frontend. Added some rigor to testing and brought test coverage up significantly. Streamlined and automated build / test/ deployment, and worked with other teams to do the same. Presented at brown bag / "lunch and learn" sessions.

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

Senior Software Engineer, IBM Kenexa Enterprise Team   *September 2012 – March 2014*

Core development work involved designing and developing a flexible multi-tenant SSO, email correspondence, and client/user/subscription management solution, implemented as mostly RESTful services, combining OAuth, SAML, and IBM's directory integration platform.

Introduced and curated best practices, enforced by a light-weight code review process. Evangelized DevOps, and worked with various teams to helped implement infrastructure, build, and test automation. Mentored QA and development teams on testing best practices, tools, languages. Stood up the testing stack that was ultimately adopted for API testing. Technologies included Groovy, Java, AngularJS, Grails, Puppet, and Vagrant.

MDconnectME Inc (Startup)
PHILADELPHIA, PA

Senior Software Engineer   *December 2011 – July 2012*

Full stack developer for the MDconnectME platform in a lean startup environment. Technologies included AWS, apache, JEE, Spring, Hibernate, JSP, jQuery, and similar frameworks. The application was featured in the New York Times, Fox Business, MSN News, and various local media outlets.

Yellowbook Inc
KING OF PRUSSIA, PA

Software Engineer   *June 2011 – March 2012*

Maintained software systems to manage Yellowbook's repository of digital business listings, advertisements, and related artifacts. Ported and optimized a set of C# ETL applications 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*

Assisted in writing proposals to acquire contracts with the Department of Defense. Researched, developed, and analyzed reliable group messaging systems for resource constrained networks using best of breed network emulation tools. Developed a distributed document sharing and collaboration

platform for US Army command and control experiments. 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 reporting, visualization, and integration layer for IP address utilization and management. Worked with consultants to optimize our IP address management system, and to import data from acquisitions. Technologies included perl, mysql, php, JEE, Spring.

Education

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

Publications

"Net-Centric Information and Knowledge Management and Dissemination for Data-to-Decision C^2 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

Skills

Technical expertise: Modern scalable cloud-based web application development, testing, and deployment. Java, Groovy, Javascript, Typescript various scripting, markup, and templating languages. Cucumber, Spock, JUnit, Selenium, GEB, and other testing frameworks. Agile methodologies, (A)TDD and BDD, and DevOps. Capable of learning new languages. Distributed systems, SOA, integration, RESTful architecture. Amazon Webservices, Jenkins, Ansible, and Docker. Vim, Linux, infrastructure automation and configuration management.

References available upon request.