# 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 as a member of a cross-functional, agile team, where I can be fearless with the code base thanks to rigorous testing.

## Experience

### Reed Elsevier, ClinicalKey
PHILADELPHIA, PENNSYLVANIA

**Senior Software Engineer, ClinicalKey Platform Delivery Team** — *April 2014 – present*

Doing awesome stuff. More to come.

### 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 develooping a flexible multi-tenant SSO, 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 development and testing practices, enforced by light-weight code review process and static code analysis. Resident DevOps evangelist, coordinated with teams, advocated for, and helped implement infrastructure automation using tools like puppet and vagrant. Led the charge towards Continuous Deployment, and put together an initial CD pipeline. Mentored QA and development teams on testing best practices, tools, languages. Stood up the testing stack that was ultimately adopted for functional web testing. Introduced, taught, and wrapped a process around database change management using liquibase to reduce ad-hoc chaos.

### MDconnectME Inc (Startup)
PHILADELPHIA, PA

**Senior Software Engineer** — *December 2011 – July 2012*

Full stack developer for the MDconnectME platform in a lean startup environment. 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.

### 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. 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 and performance tuned 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*

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 solution, and to import data from acquisitions.

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## 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.

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## Professional Organizations

- *Association for Computing Machinery (ACM)*, Member since 2012
- *Electronic Frontier Foundation (EFF)*, Gold Member since 2011

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## 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).

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## 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.