

EXPERIENCE

- **Contract Software Engineer**, November 2014–January 2019. e&e Consulting Services / PennState Hershey Medical Center. Hershey, PA.
 - Served as scrum master to lead 2 development teams to an Agile/Scrum development process using JIRA.
 - Introduced automated testing using Spock, Geb, Webdriver, Gradle, and Jenkins for building and testing web applications and command-line tools.
 - Mentored team members on best practices in test-driven development (TDD) and functional programming in Groovy through pair programming and code review.
 - Built and evolved a new identity management backend system based on Groovy, Java, Spring Boot, GORM, Hibernate, LDAP, and Oracle SQL running on Windows, Solaris, and Linux.
 - Updated, maintained, and replaced legacy Java web applications for identity management with a modern application using Grails, Groovy, and Javascript.
- **Software Engineer**, May 2012–October 2014. Learning Sciences International, Mount Joy, PA.
 - Introduced automated tests for web application based on Grails, Spock, Geb, Webdriver, Bamboo, and Jenkins.
 - Mentored and led a scrum team in Groovy, Grails, test-driven development (TDD), and executable documentation.
 - Developed new features and fixed issues in Groovy/Grails and Spring web applications backed by MongoDB and PostgreSQL.
 - Assisted automating management and deployment of applications to Linux/AWS.
 - Built load tests for web applications with JMeter and custom Geb/Webdriver scripts.
 - Built a data warehouse on PostgreSQL with ETL from MongoDB for reporting with Pentaho and custom solutions.
- **QA Automation Engineer**, July 2010–May 2012. eBay Enterprise / GSI Commerce, King of Prussia, PA.
 - Built functional tests for browser automation in Java, TestNG, Selenium WebDriver, Groovy, and Geb to test mobile e-commerce web applications (for smart phone, feature phone, and keitai).
 - Refactored and enhanced existing functional test frameworks for streamlining test development and to support testing desktop and mobile web applications.
 - Supported an agile team doing mobile web development as a full-time integrated team member.
- **Senior Software Engineer**, July 2007–May 2010. AOL MapQuest, Lancaster, PA.
 - Introduced and supported continuous integration, unit testing (JUnit), test coverage (Cobertura), performance metrics (JMeter), code review, and pairing to support quicker and more reliable agile development practices.
 - Worked closely with QA team members to build powerful automated test tools based on Fitnesse, Groovy, Grails, and HttpClient to test middle-tier search software.
 - Implemented corridor search and refined other spatial searches in SOLR and Lucene full-text search engines.

- Extended and redesigned the XML middle tier to integrate search engines, mapping components, and other data sources to provide a complete set of search capabilities on MapQuest.com website and mobile products built on Tomcat, XStream, Java, and Linux.
 - Developed an ETL system for merging and loading data into search engines using Bash, Java, Ruby, Groovy, JPA, Hibernate, and MySQL.
 - Managed source control (branching and merging) across multiple projects and code releases with Subversion.
- **Java Programmer**, February 2003–July 2007. Administrative Offices of Pennsylvania Courts, Mechanicsburg, PA.
 - Redesigned and extended the Java middle tier of the Pennsylvania Court of Common Pleas court management system based on XML, JDBC, T-SQL, and stateless and message-driven EJB on Sybase EAServer and Solaris.
 - Increased long-term maintainability through refactoring into frameworks and introducing a common build system based on Ant.
 - Trained and mentored team members on new frameworks, unit testing, and test-driven development (TDD).
 - Analyzed logging and alerts using Solaris shell scripting, Perl, and HP OpenView.
- **Senior Programmer/Analyst**, May 2000–February 2003. Educators Mutual Life & IBSi, Lancaster, PA.
 - Designed and built a CRM portal for insurance brokers based on J2EE.
 - Built a desktop application to manage insurance claims using Java, Swing, and DB2 (on AS/400).
 - Trained team members in J2EE, object-oriented design, and CVS source control.
- **Student Unix Administrator and Network Analyst**, March 1997–May 2000. Millersville University, Millersville, PA.
 - Maintained Solaris, HP-UX, and Linux workstations and servers for the Computer Science and Networking/Computer Services Departments of Millersville University.
 - Installed network hardware and built monitoring tools.

EDUCATION

- **Millersville University**. Bachelor of Science in Computer Science. May 2000.
- **Publications**
 - Ross, Paul, R. Webster, T. Bailey, S. Conrad, M. Fiorill, J. Flinchbaugh, E. Velkly, “Controlling a Pepsi Vending Machine over the World Wide Web Using Java,” *Proceedings of the International AACE WebNet98 Conference*, Orlando, Florida, November 7–12, 1998.
 - Webster, Roger, P. Ross, T. Bailey, S. Conrad, M. Fiorill, J. Flinchbaugh, E. Velkly, “Controlling a Java Enabled Pepsi Vending Machine over the World Wide Web”, *Proceedings of the 25th Annual Conference of the IEEE Industrial Electronics Society IECON '99 Conference*, San Jose, California, November 30–Dec. 4, 1999, Vol. 1, pps. 86–90.