

EXPERIENCE

- **Senior Data Engineer**, April 2019–August 2025. Sonatype. Remote.
 - Maintained data pipelines and support tools used by researchers for cataloging open source libraries across multiple ecosystems using AWS, Databricks, Spark, Java, Python, Scala, and Clojure.
 - Extensively reviewed others' code for correctness, quality, and future maintainability.
 - Upgraded, and maintained software dependencies to remediate security vulnerabilities.
 - Packaged applications for deployment by consumers with Docker, Podman, Helm, Kubernetes.
 - Reviewed, tested, and built integration features for many development and deployment platforms: Java, Groovy, Javascript, Typescript, Jenkins, Azure DevOps.
 - Certified Scrum Master for my team and others.
- **Contract Software Engineer**, November 2014–January 2019. e&e Consulting Services / PennState Hershey Medical Center. Hershey, PA.
 - Served as Scrum Master to transition teams to Agile/Scrum using JIRA.
 - Introduced automated testing using Spock, Geb, Webdriver, Gradle, and Jenkins for building and testing web applications and command-line tools.
 - Mentored on test-driven development (TDD) and functional programming in Groovy.
 - Replaced legacy Java applications with a modern Grails, Groovy, and Javascript.
- **Software Engineer**, May 2012–October 2014. Learning Sciences International, Mount Joy, PA.
 - Introduced automated testing and test-driven development (TDD) for web application based on Grails, Spock, Geb, Webdriver, Bamboo, and Jenkins.
 - 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), and code review for quicker, more reliable development and deployment.
 - Worked closely with QA team members to build automated test tools based on Fitnesse and Groovy.
 - Developed an ETL system for merging and loading data into search engines using Bash, Java, Ruby, Groovy, JPA, Hibernate, and MySQL.

- **Java Programmer**, February 2003–July 2007. Administrative Offices of Pennsylvania Courts, Mechanicsburg, PA.
 - Redesigned and extended the Java EE middleware for the court management system.
 - Increased long-term maintainability through refactoring into frameworks and introducing a common build system.
 - Trained and mentored team members on new frameworks and unit testing.
- **Senior Programmer/Analyst**, May 2000–February 2003. Educators Mutual Life & IBSi, Lancaster, PA.
 - Designed and built a CRM portal for insurance brokers based on Java EE.
 - Built a desktop application using Java, Swing, and DB2.
 - Trained team members in Java EE, object-oriented design, and 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.
 - Installed network hardware and built monitoring tools.

EDUCATION

- **Scrum Alliance**. Certified Scrum Master. 2022–current.
- **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.