

# Jarrold B. Reuter

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PERSONAL SITE: [HTTP://JARRODREUTER.COM](http://jarrodreuter.com)

## TECHNICAL SKILLS

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### Advanced Experience:

Python , C/C++, PHP, Bash-Scripting, PostgreSQL/PostGIS, HyperSQL, MySQL, Git

### Intermediate Experience:

JavaScript, JAVA, HTML, Groovy, AutoIT, JQuery, ExtJS, GWT (Google Web Toolkit), OWF (Ozone Widget Framework), SVN

### Basic Experience:

C#, Assembly, Perl, PROLOG, Linden Scripting, Torque Script, LISP, Erlang, BASIC, SNOBOL, Oracle, MongoDB

## CLEARANCE

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DOD TS/SCI

## CERTIFICATIONS

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CompTIA Security+

Scaled Agile Framework (SAFe)

## EMPLOYMENT EXPERIENCE

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Apr 2015-Present

Thermopylae Sciences and Technology

Arlington, VA

### *Engineering Manager*

*In addition to developing for individual projects, I was a technology leader within the company to disseminate knowledge, facilitate communication and help bridge technical gaps between the product teams and projects. While in this position I was self-directed and also filled in as interim Director of Software Engineering.*

### *VA Conference*

*Technology Utilized: Python, Flask, SQLAlchemy, Alembic, Jinja2, Vagrant, JavaScript*

*Created a RESTful web service to track attendees and speakers at the VA Conference using BLE (bluetooth low energy) beacons and mobile devices. This was a quick turnaround project I had to create from scratch, integrate with our mobile application and deploy to production within two weeks. The product had to be stable while bursts of up to 5,000 devices updated and queried tracking data.*

### *ODS (Orion Data Services)*

*Technology Utilized: Thrift, JAVA, YAML*

*Developed data pipelines with a team of engineers from multiple companies in an effort to collect, index and ingest data at various classification levels. This data was stored in a production JWICS environment and made accessible via the DoDIIS AppEngine (DAE).*

### *Maryland Procurement Office*

*Technology Utilized: Bash-Scripting, Jenkins, Vagrant, JAVA, JavaScript (ExtJS)*

*Disseminated knowledge to the client on how our product and its SDK are structured. Worked closely with the customer and their developers to expand the product feature-set. Managed the project and one developer to create a custom authentication adapter for product integration. Following a company restructuring, I became the sole developer and manager for the project, and a subsequent presentation warranted additional fund allocation for the following year.*

*DoDIIS AppEngine Project**Technology Utilized: Bash-Scripting, Jenkins*

Worked directly with the IA (Information Assurance) lead to gain accreditation for our product at the TS/SCI level. Met with company management to discuss additional features and created a LOE (level of effort) for the customer. Selected and managed one developer to assist in creating new features. Updated Jenkins, Maven and Nexus as needed to resume the long-deferred project. Delegated Google Earth globe creation to stay on schedule as new projects required my attention. Deployed an unclassified infrastructure to test new features in the customer environment.

Dec 2010-Apr 2015  
Software Engineer

Thermopylae Sciences and Technology

Arlington, VA

*DoDIIS AppEngine Project**Technology Utilized: Python, Bash-Scripting, Groovy, AutoIT, GlusterFS, Google Earth Enterprise, Google Fusion*

The DIA / DCGS-A effort towards unification of its information technology stack by creating an application deployment platform and utilities to encourage information sharing. Created cross platform synchronization of imagery, terrain, and vector data from acquisition through globe and map creation with Google Fusion. Utilized GlusterFS across multiple AWS instances to create a large drive for satellite imagery, terrain, and vector data storage. Produced product to generate an off-line installer for our core products and customer deliverables.

*Windshear / ICITE (Intelligence Community Information Technology Enterprise) QRC (Quick Reaction Capability) Project**Technology Utilized: PHP, Java, Sproutcore, POJOs, XML/XSLT, HyperSQL, PostgreSQL, Apache, OWF*

Customized the Ubiquity server and web code for the Army G2. Extended REST APIs to include items such as fingerprint scanning, facial recognition, search, and report gathering. Updated Ubiquity code to store and act on spatial triggers, alerting users to data relevant to their position. Implemented extensive modification of the front-end to integrate with new authentication systems and to run the UI within an OWF (Ozone Widget Framework) widget. Modified system to work with ESB (Enterprise Service Bus) and government cloud, which included creating a Java plug-in to transform all data between mobile and ESB as well as maintaining a stable connection when systems would come and go. Steered customer expectations and influenced other sub-primers to encourage collaboration and ultimate program success.

*Ubiquity Product**Technology Utilized: PHP, Sproutcore, JQuery, Prototype, PostgreSQL, Apache*

Ubiquity® is a revolutionary mobile application platform-currently developed for Google Android™ and Apple iOS-that enables users to create mobile applications with just a few clicks, uploads, and drag-n-drops. Created the product's RESTful web interface using some principles of MVC. Produced the client-side data sources to interface with the REST API. Helped create database schema and migration system to facilitate easy software updates.

*AFWA (Air Force Weather Agency) Project**Technology Utilized: JAVA, Google Earth API, Google Maps API, GWT (Google Web Toolkit)*

Provided capability to add point markers and range rings to map (2D) and globe (3D) using GWT/JAVA. Added ingest ability to consume XML data and plot locations for each 'Unit Tailored Page'. Created ability to geospatially search and request meteogram data from AFWA's servers. Added the ability to use a rich text editor to include HTML in Google Earth/Maps balloons.

Mar 2007-Jun 2009  
Research Assistant

Ohio University VITAL Lab  
Virtual Immersive Technology and Arts for Learning

Athens, OH

*Technology Utilized: Linden Scripting Language, PHP, MySQL, JavaScript*

Designed and implemented 3D, immersive educational platforms for teens and adults. Optimized code to work on a limited footprint (16KB) yet provide for customer needs. Worked closely with the customer to define their product vision and provide useful feedback on feasibility. Conducted classroom trials with teens and provided statistical analysis to improve the product.

Jan 2000-Dec 2010  
 Owner/Lead Developer

Foobar Fusion, LLC

Lancaster, OH

*Technology Utilized:* PHP, C#, MySQL, JavaScript, ddrescue, mdadm

Designed and developed web applications and customer sites. Created a CMS including drag-n-drop navigation, image gallery, on-line newsletter, custom coupon generator and more. Worked closely with another small business to deliver on customer expectations including a distributed database for disconnected employees and custom desktop software. Provided data recovery services, computer repair, network installation and RAID configuration for clients.

Jan 2007-Mar 2007  
 Teaching Assistant

Ohio University, Russ College of Engineering

Athens, OH

*Technology Utilized:* JAVA, Eclipse, Netbeans

Assisted graduate students and seniors with their projects focused on JAVA, OOD, and GUI technics. Worked with the professor to update scripts used to exercise student projects. Graded student projects and scanned for plagiarism.

## PROFESSIONAL ACHIEVEMENTS

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Top C4ISR Innovation for 2012 - Windshear Project

<http://www.defensenews.com/article/20121106/C4ISR02/311060005/The-Top-5-Winners-from-Our-Big-25>

Project Demonstration at the GeoInt '13 ('14-I) conference - DoDIIS AppEngine Project

<http://geointv.com/archive/geoint-2013-panel-innovating-with-the-dia/> (beginning at 1:08)

Credit Union Financial Education Game - Phase One

<http://www.youtube.com/watch?v=RECLk-rNI>

<http://www.youtube.com/watch?v=CSmwVMtj4g8>

## PUBLICATIONS

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Liu, C., Ye, E., Reuter, J., and Sertac, O. "A Learning Game For Youth Financial Literacy Education in the Teen Grid of Second Life Three-Dimensional Virtual Environment". *American Journal of Business Education* Vol. 4, No 7 (July 2011)

## TECHNICAL TRAINING

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| • Intelligent Robotics                      | • Formal Language & Syntactic Analysis |
| • Artificial Intelligence                   | • Design & Analysis of Algorithms      |
| • Computational Theory                      | • Modern Symbolic Logic                |
| • Software Engineering                      | • Internet Engineering                 |
| • Operating Systems & Computer Architecture | • Database Design                      |
| • Designing Massively Multiplayer Games     | • Computer Networking                  |
| • Real-Time Operating Systems               | • Perl Programming for Bioinformatics  |

## EDUCATION

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In Progress  
 MS Computer Science (Engineering)

Ohio University

Athens, Ohio

2006  
 Major/Minor: BS Computer Science (Engineering)/Business

Ohio University

Athens, Ohio