Sean Madden

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EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY
BS in Software Engineering
2006 - 2011 | Rochester, NY
Minor in Electrical Engineering
Minor in Criminal Justice
With Computer Security

LINKS

Github:// **spmadden**
LinkedIn:// **spmadden**
Twitter:// **@seanpmadden**
SOCareers:// **seanmadden**

COURSEWORK

INDUSTRY
RF and Signals Intelligence
Radar and Electronic Warfare

UNDERGRADUATE
Cryptography
Distributed Systems Design
Engineering of Software Subsystems
Information Systems Design
Requirements and Specifications
Software Architectures
Software Formal Methods
Software Usability
Software Validation and Verification

SKILLS

PROGRAMMING
Fluent in:
Java • Bash • C • C++ • Python
Proficient With:
CSS • PHP • MySQL • Javascript
Familiar:
C# • VBScript • Android • Perl
Matlab • VHDL • Assembly

TOOLS
Linux, Windows Programming
Environments
Eclipse | Netbeans | VisualStudio IDEs
GIT | HG | SVN | ClearCase SCM
Linux Driver Development
IT and Systems Management

EXPERIENCE

BAE SYSTEMS INC. | Senior Software Engineer
June 2011 – Present | Burlington, MA
- Currently Software Engineering Lead (SWEL) for a 7 person program. In charge of design, development, and integration for a system that will be Flight Tested in 2016. ($12M. Budget, 100k SLOC)
- Currently Supervising and Responsible Engineer for a 7 person subcontractor building a Human-Machine Interface for our product line.
- Lead a 10 person team to rapidly create a new capability for a major program to interface with a new protocol. Finished ahead of schedule and under budget. ($700K Budget, 30k SLOC)
- Responsible for coordination and oversight of several core software components between multiple programs.
- Represented BAE as Primary Integrator and point-of-contact to Govm't Customer for a Hardware Integration Effort.
- Primary Integrator and Test Team Lead for User Feedback capability.
- Designed and Developed Linux Driver for custom PCI-Express hardware
- Invented algorithm to hyper-accurately synchronize multiple systems in a distributed environment.

FACTSET RESEARCH SYSTEMS | Security Engineering Intern
May 2010 - August 2010 | Norwalk, CT
- Designed and developed a Quality Assurance tool that allowed the automated collection and analysis of data in a distributed environment.
- Performed security analysis and penetration testing on the primary network protocol.
- Researched and documented an undocumented binary protocol.

BAE SYSTEMS INC. | Software Engineering Intern I/II/III
June 2007 - August 2009 | Hudson, NH
- Designed and developed a mathematical graphing framework to layout and display components and connections in a distributed computing network. (7k SLOC).
- Developed a simulator of BAE Hardware & Software that was delivered to a subcontractor (12k SLOC)
- Nominated for Developer of the Month, July 2009 for going above and beyond the responsibilities of an Intern

RIT ITS/FAST SUPPORT | Senior Desktop Support Representative
Oct 2008 - May 2011 | Rochester, NY
- Worked as a first-response support member to resolve technical issues and interface with customers for RIT Finance and Administration Support Technologies
- Managed the 'Incidents' team where I reduced the trouble ticket queue from 130 tickets down to 8 while improving overall user happiness.

AWARDS

2014	Nominated for BAE Systems Chairman's Award
2014	BAE Impact Award for Improving Customer Confidence
2013	BAE Impact Award for Rapidly Responding to Requirements Change
2009	Nominated for BAE Developer of the Month
2005	Eagle Scout

VOLUNTEER EXPERIENCE

Head of Mentoring - Soc. of Software Eng.
• Designed and taught review sessions for various courses
• Designed and taught several 'Crash Courses' on various topics
RIT Ski Team, Secretary
BAE FOCUS

TALKS

PUBLIC

Sept 2012: Time in Computing

UNDERGRADUATE

April 2010	Website Security
April 2010	Threading In Java
March 2010	Regular Expressions
March 2010	Cryptography
March 2010	PyQT4 Bindings
September 2010	PHP's Propel ORM
October 2010	Linux for Windows Folks
October 2010	Basics of Eclipse
November 2010	DVCS with Mercurial
November 2010	XML with Apache's Cayenne

PERSONAL PROJECTS

NEARLY FREE SPEECH.NET JAVA API | API CLIENT
On GitHub
- 3k SLOC, Java
- API HTTP REST Client for NFSN's API

USGS SRTM1 DTED DOWNLOADER | WEB SCRAPER
On GitHub
- 3k SLOC, Java
- HTTP Client and Webscraper to download selected portions of the US Geological Society's (USGS) Shuttle Radar Topography Mission (SRTM1) Digital Terrain and Elevation Data (DTED)

SMMSP SATELLITE TRACKING | SPACE PROGRAM
On GitHub
- 6k SLOC, Java
- Suite of Java-based Astrometrics Utilities for Orbital Tracking
- Plans for Android, iOS, and Desktop Applications for Orbital Information

RIT'S BETTER CLAWS | CHROME EXTENSION
On GitHub
- 700 SLOC, Javascript
- Chrome Extension and Greasemonkey Script to massively improve the RIT CLAWS Identity and Access Management Web Interface

FAST INTERPRETYPE | HARDWARE INTERFACE, ACCESSIBILITY
On GitHub
- 7k SLOC, Java
- Reverse-engineer of the Deaf Communications Software to interact with an Interpretype Hardware device
- Currently deployed through RIT's Finance and Administration

FAST LDAP SEARCH | NETWORK CLIENT
On GitHub
- 12k SLOC, Java
- Automated & Scriptable method to query and aggregate information from LDAP Groups
- Presents information using customizable & extensible reports
- Utilized by key administrators in RIT's Finance and Administration

SEANSLIBS - JAVA | LIBRARY COLLECTION
On GitHub
- 8k SLOC, Java
- Core Libraries for Several other Projects
- Includes Classloading, Logging, XML, JSON, and Graphing/Charting