**David Czarnecki**
782 N Wakefield St
Arlington, VA 22203

860-874-2011 (cell)
me@daveczarnecki.com

## Work Experience

- **Solers, Inc.** Arlington, VA
  *System Engineer* *Aug. 2009 - Present*
  - Lead Test Engineer Enterprise Messaging 4.1 - Machine to Machine messaging system implementing WSE and WSN base notification standards; combining functionality of two legacy machine messaging systems
    * Developed initial functional requirements for system by analyzing documentation of legacy systems and communicating with customer base
    * Worked with development team to implement debugging features for test frameworks. Included interjecting correlation ID in HTML headers to index log files and streamlining wire-logging configuration.
    * Provided technical knowledge and support for government acceptance testing
    * Expanded automated testing interfaces for new features including AMQP client interface and federated message delivery between distinct nodes deployment sites.
    * Supervised efforts of two test engineers as well as creation of user documentation for software release
  - Test Platform Developer - Proposed, designed and developed automated testing platform for web Services testing with emphasis on team communication and auditing to help with agile development
    * Developed and implemented Puppet framework for automatic deployment and configuration of virtual machines using KVM. Able to deploy a test environment of ten dynamically configured virtual machines with new software builds installed in minutes.
    * Developed multi-threaded clients capable of running test cases using commercial open source tools (SoapUI), software sdk, and legacy sdk clients. Tool's functionality include creating and recording SOAP requests and responses, SSH commands, software log recording, and testing for dynamic values.
    * Organized test cases and test results into central MySQL database for a write once, run with any client approach. Increased functional regression test portfolio from 30 tests to over 200 while decreasing regression testing responsibility to one engineer.
    * Tested seven releases of Enterprise Messaging performing 698,247 test commands and recording results, which conservatively equates to 242 days of labor.
    * Published test case results to internal website using Django Framework for developers to analyze results including software logs organized by test step. Allowed developers to access all available relevant information from within links in bug reports.
    * Developed Bash scripts to install software builds in a ten node, clustered test environment integrating with F5 Load Balancers and IBM Datapowers. Reduced deployment time of release candidate builds to minutes as opposed to hours. Entered custom values for each server into install prompt using PExpect.
    * Created C# console application to automate test document creation in Microsoft Word, reduced budgeted documentation time from a week to a half day allowing for more time to write tests. Integrated test case database with JIRA requirements database
  - Lead Engineer Joint Logistics Enterprise Development Solution Quick Reaction Test - Effort to enable the sharing of logistic data across enclaves using enterprise solutions in support of the Afghan Retrograde
    * Technical consultant for DoD CIO effort to provide enterprise solution to expose data from different domains. Main focus was to limit end user efforts to obtain authorization by utilizing DoD Enterprise Attribute Based Authorization Solution.
    * Wrote Quick Reaction Test Plan detailing the technical efforts necessary to achieve a successful completion of the QRT objectives. Presented plan to all US Combat Commands.
    * Developed and tested Mule Enterprise Service Bus workflow to connect with multiple SOAP web services providing logistic data from different knowledge domains across the DoD. Allowing user one service and authorization solution for multiple sources of logistical data
    * Implemented several WS-Security solutions within an IBM Datapower security device to allow successful connections with web services, including legacy systems.
  - Lead Test Engineer Seros Product Line
    * Developed testing framework using Selenium-RC automating tool to perform functional tests on web portals, recording screen-shots for all tests as well as verifying web elements were present. Created base test framework that was tailored to three distinct products; reducing test development time. Adapted tool to work with asynchronous, dynamic web pages as well as testing with Firefox and Internet Explorer

* Developed scripts to simulate network environments with heavy latency and lower throughput using TC Linux command to test network adaption software functionality
* Performed load testing on messaging product with JMeter load testing tool.

## Education

- **University of Virginia** Charlottesville, VA
  *Masters of Science in Systems Engineering* *Sep. 2007 - Aug. 2009*
  - Thesis: "A Utility-Based Content Adaptation Scheme for Low Capacity Wireless Video Surveillance Systems"
- **University of Virginia** Charlottesville, VA
  *Bachelor of Science in Systems Engineering* *Sep. 2003 - May 2007*

## Skills

**Languages:** Java, Groovy, Python, Bash, C#

**Test Frameworks and Other Software:** SoapUI, Selenium, MySQL, Django, JMeter

**Operating Systems:** Linux, Windows 7

**Miscellaneous:** TS Clearance with SCI, Security+ Certified

## Other

- **Assistant Coach NOVA Cowboys Youth Football** Alexandria, VA
  *Defensive Coordinator* *June 2011 - November 2011*
- **System Engineering Design Symposium at the University of Virginia** Charlottesville, VA
  *Judge* *2010 & 2011*
  - Responsible for judging IEEE conference papers
- **Robotic Systems Design Camp** Charlottesville, VA
  *Head Counsoler* *Summer 2007 & Summer 2008*
  - Designed and implemented week long curriculum to expose middle school students to math and Engineering. Taught concepts as design and simulation using software tools (Netlogo) and the Lego NXT robot platform