AFEIQUE SHEIKH

 $U.S.\ Citizen \cdot afeique@gmail.com \cdot afeique.com$

COMPETENCIES

Linux, Windows, Mac OS X, C/C++, x86(-64), Bash, PHP, Perl, Python, JavaScript, Java, Action-Script 3, Matlab, SystemVerilog, XML, HTML, CSS & SASS, Git, SVN, CVS, MySQL, PostgreSQL, LabVIEW, TestComplete

EXPERIENCE

Test Automation Engineer

November 2015 - February 2017

BOSCH SECURITY SYSTEMS · FAIRPORT, NY

- » Instrumented virtual machines for regression testing desktop software and running Linux servers (Debian/Ubuntu)
- » Developed Python library for testing network-based remote-operation (Mode2) protocol using sockets
- » Lead engineer for testing C# SDK and writing C# test cases
- » Primary resource for testing panel's network stack encryption (TLS 1.2) capabilities
- » Engineered network-load tests using randomized ARP and IP-layer packets
- » Performed email testing using dummy servers to verify encrypted email functionality
- » Lead test engineer for web QA, developed suite of automated browser-driven tests using py.test and Selenium (Python, HTML, CSS)
- » Additionally used TestComplete for browser and mobile QA automation
- » Debugged and enhanced TestComplete automation designed by contract workers
- » Created TestComplete libraries for instrumenting and running automated regression using virtual machines
- » Completed LabVIEW Core 1 and 2, as well as TestStand Core 1 and 2 NI Training
- » Wrote scripts to interface with National Instruments Digital Acquisition hardware using Python wrappers over NI C DAQmx APIs
- » Extended and refined basic LabVIEW test automation by modularizing components and writing Python-based report generation subsystem (Python, HTML, CSS)

Python, PHP, MySQL Engineer

May 2015 - November 2015

PNC BANK · PITTSBURGH, PA

- » Learned development of Zenoss Plugins (Zenpacks) using zenpacklib (Python)
- » Extensively researched and learned FuelPHP MVC framework and Silex, Flight, Fat-Free microframeworks (PHP, MySQL)
- » Developed a feature request system, from schema through logic and UI/UX, using FuelPHP, Bootstrap, and jQuery (PHP, MySQL, HTML, CSS, JavaScript)

Linux Engineer

June 2014 - January 2015

TIMESYS CORPORATION · PITTSBURGH, PA

» Re-implemented boot-testing scripts to add URI handling, database logging, and enhanced network efficiency (Perl, PostgreSQL, Bash)

- » Developed web UI for boot-testing system and inventory management using web.py (Python, Post-greSQL, HTML, CSS, JavaScript)
- » Created interface for tracking build failures and submitting bugs (Python, Perl, HTML, CSS)
- » Administered local drone-network for continuous-integration using Python, pip, and virtualenv
- » Tested the Freescale i.MX53 QSB and TI AM335X Sitara embedded boards

Programmer, QA Analyst

Spring 2012

University of Rochester · Rochester, NY

- » Worked on URGlobal initiative using CodeIgniter framework
- » Focused on controller logic and UI (PHP, HTML, CSS, JavaScript)
- » Added functionality to database models (PHP, MySQL)
- » Designed automated browser regression tests for quality assurance
- » Wrote compatibility patches in anticipation of server upgrades (PHP)

Digital Design Intern, Kitson Cache Team

Fall 2011

INTEL CORPORATION · HUDSON, MA

- » Worked on improving regression testing and validation software (Tcl/Tk)
- » Created CLI for querying data from CAD characterizations (Perl)
- » Focused on CAD of VLSI gate structure, silicon layout, and timing

Web Programmer

Spring 2011

IZIKS INTERACTIVE · PITTSBURGH, PA

- » Developed web software for clientele using in-house CMS framework (PHP, MySQL)
- » Strong focus on improving UIs (HTML, CSS, JavaScript and AJAX using jQuery)

EDUCATION

B.S. in Electrical and Computer Engineering

Senior, Capstone Complete

CARNEGIE MELLON · PITTSBURGH, PA

Four years total: six semesters at CMU (including Engineering capstone), two semesters at other colleges (focus on math and comp. sci.)

Intro to Computer Systems Computational Techniques in Engineering

Advanced Java Programming Programming in C/Unix Sensor System Design Signals and Systems

Analog Devices and Circuits Structure and Design of Digital Systems

Matlab Programming Data Structures using Java

Honors & Awards

Dean's List (Fall 2010) · Xerox Technical Minority Scholarship (Spring 2009)

William Orr Dingwall Grant (2008–2012) · Pittsford Sutherland Honors Graduate (June 2008)