William Truong

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San Francisco Bay Area

408-598-7306

Senior Software Engineer looking to be part of an essential team building the next generation of products and services utilizing machine learning and data science.

CERTIFICATIONS

Data Analyst Nanodegree, Udacity, Expected Jan 2016
Machine Learning Specialization, Coursera, Expected April 2016

TECHNICAL SKILLS

Python: pandas, scikit-learn, numpy, matplotlib
C/C++: STL, POSIX (Pthreads, cstdlib, sockets), VxWorks, LINUX, yacc, lex
R: ggplot2, dplyr, data.table
Tools/Frameworks: MongoDB, Git, SVN

PROJECTS

Exploratory Data Analysis: Capital Bikeshare Program in Washington, D.C., Nov 2015

> Investigated the possibility of using linear regression to predict the number of bikeshare usage for a given hour and day of the week using cross referenced weather information.

WORK EXPERIENCE

Senior Software Engineer, GA-ASI, Sept 2011 - Apr 2015, (San Diego, CA)

Responsibilities
- ▸ Work with project engineers, vendors, and customer to create system and software level requirements, storyboard proposals for new features, define new software interfaces, write system test procedures, and implement design for hard real time flight and soft real time ground components on Unmanned Aerial Systems **[C/C++, Python, POSIX, Linux, VxWorks, MIL-STD-1553, TCP/IP, Pthreads, Qt, X11/Motif, XML]**

Accomplishments
- ▸ MQ-9 AFSOC Software Team, Jan 2014 - Apr 2015
  - ∗ One of two software leads in a new team of 10+ formed to increase MQ-9's multi-mission capabilities in regards to increased flight endurance, decreased takeoff time, additional weapon support, and new ISR platforms for Air Force Special Operations Command
  - ∗ Within one year, software team fielded 3 major system releases under 6 month release cycles, as opposed to the previous team working on the traditional 1-2 year release cycle
  - ∗ Main developer on a personally initiated effort to refactor a key component with a flawed design with the touch system responsible for multiplexing mission critical video sources on the ground control system **[Linux, POSIX sockets, sigslot, X11/motif, C/C++]**
  - ∗ System was named as a finalist in Aviation Week Program of Excellence Awards 2015.
- ▸ MQ-9 Brimstone Demonstration, Oct 2013 - Dec 2014
  - ∗ Lead a software team to demonstrate potential capabilities of integrating MBDA's missile platform onto MQ-9 platform in a short span of 3 months **[C/C++, MIL-STD-1553]**
  - ∗ Successfully demonstrated during trials with 9 direct hits involving static, accelerating, weaving, fast and very fast remotely controlled targets
- ▸ MQ-1 USAF UAV Team, Sept 2011 - April 2012 (Under Contract), April 2012 - Oct 2013
  - ∗ Developed enhancements and resolved known anomalies in forward looking development branch that eventually made way to several software releases for multiple customers **[C/C++]**

Software Engineer, Northrop Grumman Information Systems, Jan 2009 - Sept 2011, (Sacramento, CA)

Software Lead for ELINT (ELectronic INTelligence) Subsystem, Jan 2011 - Sept 2011
- ▸ As a software lead worked closely with program management, system engineers, electrical engineers, sensor operators, and integration team to field last release of ELINT subsystem under Guardrail Modernization contract.

Software Engineer for ELINT Subsystem, Jan 2009 - Jan 2011

- Aided senior software engineer in developing Linux PCI kernel served to communicate with FPGA daughter card that commanded ELINT sensors **[C, Linux Kernel, MIL-STD-1553]**
- Thread-safed proprietary event-driven messaging interface used by subsystem to allow for development of multi-threaded applications **[C, Pthreads, TCP/IP, DNS-SD]**
- Developed an event-driven server daemon that resided on subsystem responsible for initialization and rerouting of messages between air and ground components **[C++]**
- Developed and documented command line test utility for electrical, test, and field engineers to verify and validate subsystem hardware **[C, yacc, lex]**

EDUCATION

B.S., Computer Science, University Of California, Davis, 2009