LinkedIn

William Truong

Technical lead, 9+ years experience, with a penchant for building expressive and performant software using functional and object oriented principles under system constraints to address business needs. Understands that code is read more than it's written or changed.

Currently leading a team building data pipelines using Apache Spark to perform speedy batch aggregations for reports, and Apache Kafka + AWS Redshift to fuel near real-time dashboards.

TECHNICAL SKILLS

Programming Languages: Scala, Java 8, Node.js, Python
Frameworks and Systems: Apache Spark, Kafka, PostgreSQL, MySQL, Redshift, Spring, Express, GraphQL, Elasticsearch

WORK AND ACADEMIC EXPERIENCE

Health Fidelity, San Mateo, CA,
Technical Lead (Jan 2019 - Present)
Senior Software Engineer (Oct 2016 - 2018)

Build HIPAA compliant RESTful web services under the the **Spring Framework** to assist healthcare organizations improve their risk adjustment performance by providing revenue opportunities based on KPI dashboards, maps, graphs, and reports, under the AWS ecosystem **[Java, JDBC, MySQL, Scala, Spark, Kafka, S3, EMR, CloudFormation]**

- Key contributor to Risk Analytics team spearheading effort to transition existing data aggregation and batch processing functionality under **Java, JDBC, and MySQL** to a more scalable, distributed approach with **Scala and Apache Spark** to decrease costs and address business need of generating larger reports under a shorter amount of time
- Exposed to team a developmental workflow for rapidly prototyping batch processing functionality to serve as a proof of concept to upper management, showing potential to scale as well as having 56x performance gains for gigabyte scale datasets
- Work with DevOps and Architect to lay out system architecture for leveraging **Spark** inside **Amazon EMR** for use in HIPAA compliant production environment

Took initial ownership of involvement to integrate Risk Analytics platform with new event infrastructure to consume real time events using **Kafka** infrastructure recently rolled out by infrastructure team.

- Built module for utilizing Kafka Streams and Consumers to read events created at customer site to monitor progress and productivity.
- Work very closely with architect and infrastructure team to ensure new Kafka cluster and event infrastructure is ready for production by providing constructive feedback from downstream consumer's point of view.

Applied prior working knowledge with bitsets and bitwise logic as an embedded systems engineer to speed up rule matching behavior to take only .05 percent of original time.

Fluid, San Francisco, CA,
R&D Software Engineer (Feb 2016 - Sept 2016)

Part of Fluid Expert Personal Shopper (XPS), the first e-commerce SaaS solution aimed to supply online retailers with a service recommending products to customers (1800flowers.com, The North Face) through conversation by utilizing NLP and Machine Learning techniques **[Node.js (Express), Java 8, ElasticSearch, TinkerPop, EC2, S3, CloudFormation, CloudWatch]**

- Built RESTful web services under Express for implementation team to interface with **[Node.js, Express]**
- Conceptualized into production the use of ElasticSearch to take advantage of Lucene's abilities in handling unstructured text and relevance scoring
- Created a SGD classifier with text input to characterize products for implementation team to use on customer datasets **[pandas, scikit-learn, jupyter]**

Personal Sabbatical (Apr 2015 - Feb 2016)

Seized opportunity to take time off prior to moving back to Silicon Valley to pursue dream of travelling Southeast Asia by motorcyle.

- Managed and assessed risk in challenging environments and life threatening situations
- Polished soft skills communicating with people from diverse backgrounds

Enrolled and completed **Udacity Data Analyst Nanodegree**

- Exposed to data analysis process of wrangling, exploring, analyzing, classifying, and visualizing data through completing project based work **[d3.js, R, python, pandas, scikit-learn, jupyter]**

Senior Software Engineer
General Atomics Aeronautical Systems Inc., Sept 2011 - Apr 2015, (San Diego, CA)

Worked with project engineers, vendors, and customers to create system and software level requirements, storyboard proposals for new features, define new software interfaces, write system test procedures, and implement software for flight and ground components in several unmanned aerial systems under the service oriented architecture paradigm **[C/C++, Python, POSIX, Linux, VxWorks, MIL-STD-1553, TCP/IP, Pthreads, Qt, X11/Motif, XML]**

Technical Lead, MQ-9 AFSOC, 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 AFSOC.
- Within one year, software team fielded 3 major system releases under 6 month release cycles, as opposed to previous team working on traditional 1-2 year release cycle, with one release being a finalist in Aviation Week Program of Excellence Awards, 2015.
- Spearheaded effort to refactor a flawed design with touch system responsible for multiplexing mission critical video sources on ground control system by using MVC and OO principles. **[Linux, POSIX sockets, sigslot, X11/motif, C/C++]**

Technical Lead, 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]**

Developer, MQ-1 US Air Force UAV Team, Sept 2011 - Apr 2012 (Under Contract), Apr 2012 - Oct 2013

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

Technical Lead, ELINT (ELectronic INTelligence) Subsystem, Jan 2011 - Sept 2011

- 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, ELINT Subsystem, Jan 2009 - Jan 2011

- Created and maintained applications under the service oriented architecture paradigm to allow sensors on multiple aircraft to survey, collect, and aggregate data in real time through line of sight communications **[C/C++, Pthreads, TCP/IP, DNS-SD, yacc, lex]**

CERTIFICATIONS

Big Data Analysis with Scala and Spark, *École Polytechnique Fédérale de Lausanne on Coursera*, Apr 2017

Data Analyst Nanodegree, *Udacity*, Aug 2016

Data Munging, Exploratory Data Analysis, Classification, Data Visualization, A/B Testing

Machine Learning, *Stanford University on Coursera*, Jan 2016

EDUCATION

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