

LANGUAGES AND TECHNOLOGIES

- C++, C#, ASP.NET, Python, SQL, HTML, CSS, JavaScript, XML
- Oracle, SQLite, Django, Git, Perforce, Google Test, NUnit, Visual Studio, Eclipse, Momentics, JIRA

PROFESSIONAL EXPERIENCE

Software Developer

September 2016 – December 2020

Susquehanna International Group, LLP – Bala Cynwyd, PA

- Maintained an ASP.NET web-application in conjunction with distributed WCF C# microservices and an Oracle database for 600,000+ records. Improved latency and reliability in all layers of the stack.
- Created a new WCF C# microservice to map order routing to an exchange. Implemented the service APIs to read and write to multiple tables in a single transaction, while handling several edge cases.
- Constructed a separate C# application to handle data changes in bulk. Significantly reduced load on developers for ad-hoc requests; increased accuracy of data updates to a complicated data model.
- Added an automated unit testing system using the NUnit framework. Tested server-side logic, data I/O, as well as data integrity.

Software Engineer

August 2014 – September 2016

THINK Surgical, Incorporated – Fremont, CA

- Designed, developed, tested, and released production software for a robotic surgical device utilizing C++ and XML on a Unix platform. Created new functionality; improved pre-existing modules.
- Incorporated an SQLite database and a wrapper server process for interfacing with database APIs. Created a modularized client singleton class for inter-process communication to the database server.
- Introduced and incorporated the C++ unit test framework GoogleTest on a QNX platform. Added heavy unit testing in several areas, including XML parsing, database I/O, and inter-process communication.
- Created custom tailored software for the clinical and marketing teams to perform quick and easy demonstrations at several major conferences.

Software Test Engineer

January 2014 – July 2014

THINK Surgical, Incorporated – Fremont, CA

- Designed and executed risk-based software integration level tests covering Diagnostics and Calibration functionality of a robotic surgical assistant.
- Trained company personnel on proper use for new software features of a robotic surgical assistant, including developers, electrical engineers, and clinical trainers.

Software Test Engineer Intern

May 2013 – August 2013

THINK Surgical, Incorporated – Fremont, CA

- Implemented and managed an email notification system for an automated testing system integrated with commercial static analysis tools, and made front-end changes for usability.
- Established specifications and validation procedures for off-the-shelf software.

EDUCATION

Bachelor of Science, Computer Engineering
Minor, Computer Science

December 2013

University of the Pacific – Stockton, CA