DANA S. NATOV

EDUCATION

CSU Sacramento 2013-2017

Cumulative GPA: 3.549 | Bachelors of Science, Electrical and Electronic Engineering

Academic Interests: Programming, Analog/Digital Control Systems, Robotics

WORK EXPERIENCE

Gold Standard Diagnostics – Manufacturing/Validation Intern 2012-2017

- Responsible for assembly and sub-assembly build processes. Trained in soldering, programming and troubleshooting medical diagnostic machines.

Gold Standard Diagnostics – Software Test Engineer 2017-2019

- Responsible for software/hardware QA on three robotic medical diagnostic instruments, the Thunderbolt, Bolt and AIX1000.
- Performed full range of System Integration Tests
- Automated several software applications under testing using C#, Python and Powershell.
- Wrote 200+ XUnit tests to improve code coverage.

Gold Standard Diagnostics – Software Engineer 2019-Present

- Full-Stack Software Engineer developing software for four different medical diagnostic robotic instruments. Utilizing C#, Oxygene, .NET, ASP.NET.
- Implemented notification system using programmable SMS and Email via the Twilio API.
- Implemented and organized code reviews and pull request practices.
- Developed an application for merging existing SQLite databases into one while accounting for multiple foreign key constraints.
- Increased database backup and restore speeds utilizing tar archiving instead of zip compression.
- Started review process for printed circuit board (PCB) manufacturing. Reviewing PCB schematics before they are sent to fabrication.

PROJECT EXPERIENCE

Senior Design Project

One year design project requiring first semester prototype and second semester deployable prototype. Automated in-home medication dispenser with a custom cartridge design allowing automatic uploading of medication schedules.

FRC team 1678: Citrus Circuits 2012-2015

Student from 2012-2013, Mentored students from 2013-2015. Built successful medium size robotic systems on a strict six week deadline. Taught students the accelerated development cycle of a robotic system. In 2015 our team won the World Championship.

OpenCV Candy Sorter

Developed a Python OpenCV algorithm to classify different shapes and colors of candy. The output was fed into a custom PID controller to sort the candy into the correct bin.

SKILLS

Languages

C#, Python, C (Embedded), Oxygene, Powershell, Bash, HTML, CSS

Technologies/Frameworks

Git, Atlassian, FogBugz, .NET, MVVM, XUnit, Ubuntu, ASP.NET, Visual Studio, Visual Studio Code, Jenkins, Cake, OpenCV (Python), KiCAD

PROFESSIONAL ORGANIZATIONS

- Tau Beta Pi Engineering Honor Society Member 2016-Present