

Introduction

I am a computer engineer with a background in robotics and automation. I love breaking things apart and learning how they work.

Education

- 2015–2016 **Master of Science**, *Santa Clara University*, Santa Clara, CA
Computer Science and Engineering with a Software Engineering Emphasis
- 2011–2015 **Bachelor of Science**, *Santa Clara University*, Santa Clara, CA
Computer Science and Engineering with a Mathematics Minor
Graduated with Honors and Magna Cum Laude

Experience

- 2015–current **Senior Software Engineer**, *Varian Medical Systems*, Palo Alto, CA
Write software and design hardware to automate and aid in the manufacture of radiation therapy machines. Create design requirements, risk assessment, test case and validation documentations to meet FDA standards for validation of new automation software.
- 2014–2015 **Consultant**, *Pelican Imaging*, Santa Clara, CA
Wrote code to automate camera testing and validation, through both robotic stages and image post-processing.
- 2013–2014 **Computation Intern**, *Lawrence Livermore National Laboratory*, Livermore, CA
Developed quickly and inexpensively a functional physical-layer hardware-software simulator and low-level communication testing tools to validate hardware-software interactions.
Ensured maximum operator productivity at the NIF by identifying the root cause and finding a solution for camera failures through the reverse-engineering of drivers and firmware.
- 2010–2016 **Owner**, *Accufire Systems*, www.accufiresystems.com
Created software to help competitive shooters practice shooting in their homes with a pulse laser source, utilizing their computer and webcam.

Skills

- Languages C/C++, C#, Java, Python, MATLAB, SQL
- Paradigms Software Formal Methods, Machine Vision, Reverse Engineering
- Tools Visual Studio, Eclipse, Git, SolidWorks, AutoCAD, MySQL, SQL Server, Eagle, KiCad

Awards and Certifications

Santa Clara University Presidential Scholarship
Lockheed Martin National Merit Scholarship
Lawrence Livermore National Laboratory Computing Applications and Research Award
LLNL National Ignition Facility and Photon Science Award

Interests

Modular Synthesizers
Craft Beer (See what I'm currently brewing at untappd.com/DeBoniBrewing)
Robotics