

Zach Hannum

(910)-795-5693 | zacharyhannum@gmail.com | www.zachhannum.engineer



Work Experience

Garmin

June 2021 - Present

Software Engineer II

- Developed high-level device software using C/C++ for fitness products used by tens of thousands of consumers
- Implemented critical device software for managing LTE subscriptions for a wellness product
- Analyzed over twenty thousand device location pings using Python scripts to improve location-based performance and battery efficiency
- Worked closely with UI/UX designers to implement Figma designs as software features for new fitness products
- Fixed high priority software bugs identified by verification engineers

Plexus, Corp.

Software Engineer II

Oct 2019 - June 2021

- Served as subject matter expert, mentor, and technical lead for GUI sub team using Qt/QML
- Created detailed on-boarding and training plans for new members of project team
- Led group and 1-on-1 training sessions with project members to increase team velocity and improve efficiency
- Engaged with external customers to quote projects, provide project status updates, and drive product development
- Drove the use of MkDocs as a company-wide tool for technical documentation on projects

Software Engineer I

Jan 2018 - Oct 2019

- Developed and tested GUI features for a medical device on QNX using Qt/QML to customer specifications
- Designed, implemented, and reviewed software following a test-driven development paradigm using modern C++ and GoogleTest
- Created scripts in Python for managing development environment to improve team efficiency
- Collaborated with software team, project managers, and external customers in an Agile/Scrum environment
- Fixed critical software bugs to support software verification for software safety Class C medical device
- Authored verification procedures and supervised software verification for software safety Class B medical device to confirm product met product and software specifications

Kast Clothing

Aug 2016 - Dec 2017

Co-Founder

- Co-founded Kast Clothing, using technology to provide better fitting clothes online
- Created custom patterns and tested fit with real-time physics simulations
- Entered Lulu eGames, taking 1st place in the fan favorite Built on Cloud video, winning \$500

Best in the Verse Audio

May 2014 - Dec 2017

Founder

- Created hand-crafted custom cables for audiophile headphones

Technologies, Languages, & Interests

Languages

- C++, C, Typescript, Javascript, QML, Python, Bash, HTML, CSS, Java, Rust

Technologies and Frameworks

- ReactJS, Gatsby, Git, Qt, Linux, Django, Figma, Gerrit, CMake, QNX, DDS, Boost, GoogleTest, Bamboo CI (Java-based), Enterprise Architect

Interests

- GIS/Cartography, writing, art, photography, procedural generation, 3D printing, 3D modeling, virtual reality

Projects

Calamus | [See project on GitHub](#)

Open-source Cross-platform Desktop application for writing and publishing novels

- Written with Electron, Typescript, and React
- Built for writing with Markdown and generating Ebooks and print-ready PDFs for self-publishing novelists

MkDocs Autolinks Plugin | [See project on GitHub](#)

Open-source plugin for MkDocs, a project documentation tool, for generating links between pages

- Written in Python to interface with MkDocs plugin API
- Downloaded 4,500 times per month on average and used in over 150 projects on GitHub

Education

North Carolina State University

Bachelor of Science, Computer Engineering

Bachelor of Science, Electrical Engineering

GPA 3.6