

EDUCATION

Collegedale, TN

Southern Adventist University (SAU)

Aug 2017 - May 2021

- Degrees: Master's / Bachelor's Computer Science - Embedded Systems Emphasis (Master's GPA: 4.0)
- Coursework: Data Structures & Algorithms in C++, Operating Systems, Network Security, Microcontroller Design, Computer Arch & Assembly, Embedded Systems Dev, Machine Learning

EXPERIENCE

Software Developer, Intern

Center for Innovation and Research in Computing, SAU

Jan 2018 - Present

- Created registration system for [ShareHim.org](https://sharehim.org) using Laravel's PHP MVC framework
- Managed server-side registration data using MySQL Database
- Designed registration front-end using Google's Materialize front-end framework

Computer Science Student Mentor

SAU

Aug 2018 - Present

- Provided academic support for 30+ computing major freshman through tutoring, degree scheduling, etc.
- Taught as a teaching assistant for SAU's computer science orientation class

Software Engineer, Intern

AppEsteem (STARTUP)

Jun 2019 - Aug 2019

- Developed web interface for [AppEsteem.com](https://appesteem.com) with react.js and semantic UI front-end framework
- Implemented secure subscription-based payment system through Chargebee
- Managed and integrated user account data with Firebase

PROJECTS

Personal Website: www.jonathanbatchelder.com (for additional project information)

YeetPost Mobile (in development)

- YeetPost is an iOS and Android messaging application, developed with Flutter. Users create location-based posts, called yeets, with the option to be anonymous. Unlike most social media and messaging applications, Yeetpost will contain a cyberbullying detection algorithm that will remove offensive yeets and replies using machine learning (TensorFlow).

Muscle Sensor LED Display

- This embedded systems project detects muscle contractions and displays it on a 32x32 LED screen. The harder you contract your muscle, the larger the wave. Any large enough muscle is compatible, such as the biceps, forearms, or even forehead muscles!

Real-time LED Image Display

- Allows a user to take images from a phone and display it in real-time on a 32x32 LED display! An IR remote can be configured to scroll through 10 different display files. Also, an ambient light sensor can be used to control the display using surrounding light. Built with the Raspberry Pi.

Mobile Bible App

- An iOS and Android Bible application. Developed as a group project using Flutter. A user selects the desired Bible verse using on-screen drop-downs.

SKILLS & CERTIFICATIONS

- Skills: Agile development, C++, Flutter, NoSQL, MySQL, Git, PHP, Bootstrap, HTML/Javascript/CSS, Node.js, Laravel, Yii 2.0, Python, Java
- Certification: **CompTIA Security+** (Issued June 2019)