# **Nick Schnabel**

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### **EDUCATION:**

Santa Clara University - Santa Clara, CA

September 2014-June 2018

Bachelor of Science in Electrical Engineering (minor in Computer Engineering)

Cumulative GPA: 3.94, Major GPA: 3.97

#### **Relevant Coursework**

Introduction to Logic Design, Electric Circuits I, Electric Circuits II, Linear Systems, Advanced Programming in C, Abstract Data Types and Data Structures, Advanced Data Structures in C++, Linear Systems, Electronic Circuits I, Embedded Systems, Digital Integrated Circuit Design, Advanced Logic Design, Communication Systems, Programming Languages, Web Programming I, Object Oriented Analysis and Programming

#### **TECHNICAL SKILLS:**

- Languages: C, C++, Java. Experience with Python
- Web Development: HTML, CSS, Javascript, Bootstrap, jQuery. Experience with PHP, MySQL, AngularJS
- Graphic Design / UI: Adobe Illustrator, Adobe Photoshop
- Experience with circuit logic design, Arduinos, Raspberry Pis, Oscilloscopes, MATLAB, Sketchup, and Altera boards

### **PROJECTS**

- Created a web application to ease scheduling and the process of finding a replacement for teaching assistants
  - o Wrote the HTML, CSS, Javascript, and some of the PHP for the app
- Created a wireless communication system that utilizes visible light communication to pass data through the LED headlights of vehicles
  - Designed and built the LED driver circuit and light receiver circuit, implementing them on breadboards
  - Modulated data using Manchester Encoding on the Tx, synchronized and demodulated data on the Rx
  - o Controlled both the transmitter and receiver with Arduinos
- Currently working on a project to build IOT flood monitoring nodes for the government of the city of San Jose
  - Utilizes a Raspberry Pi and sensors to collect data from rivers about the possibility of flooding
  - o I'm the head of the wireless communication team, implementing LoRa on the Raspberry Pis

#### **JOB / VOLUNTEER EXPERIENCE**

Software Engineer Intern at Arris (June – September 2016)

- Worked on the R&D team designing, implementing, unit-testing, and debugging for Arris telco gateways (in C)
- Wrote standalone scripts in C++ and Python to sort and collect usage data of phrases within the web UIs
- Lead the effort to implement Bootstrap on the web UIs for Frontier remote gateways, which will be pushed to >
  1 million devices when shipped

Product Engineer Intern at BaseVenture Digital Fund Management (June - September 2016)

- Worked on the product team at BaseVenture Digital Fund Management
- Created mock ups on Adobe Illustrator and helped design pages of fund management platform
- Wrote scripts in C++ to automate the creation of fake user data for demoing

## **AWARDS AND HONORS**

- Honors Program, Santa Clara University
- Member of Tau Beta Pi, Santa Clara University
- Carl H. Hayn Physics Prize: Awarded annually to the most outstanding student in the Physics for Scientists and Engineers sequence at Santa Clara University
- School of Engineering Dean's List, Santa Clara University (2015, 2016, 2017)
- Valedictorian of Junipero Serra High School (2014)