

# George Cole Shaffer

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## EDUCATION

**University of Michigan**, Ann Arbor, BS Computer Science; Graduated December 2019

## TECHNICAL SKILLS

- C/C++, Python, Ruby
- Web Development
- React, Ruby on Rails
- Postgres, SQLite
- Networks
- Bash/Scripting
- Linux Driver Development
- Neural Networks, SVMs
- iOS App Development

## SOFTWARE ENGINEERING EXPERIENCE

### **Elektrobit** Software Engineer

June 2021-June 2022

I worked on the Sirius-XM team within Ford's SYNC 4 project, analyzing bugs and implementing code changes in order to integrate Sirius's proprietary codebase into the SYNC platform. I worked C++ and QT in a highly-concurrent message-passing environment facilitating audio streaming via both Satellite signal and IP. I handled bugs from start to finish, analyzing large log sets containing numerous files (some with 100k+ lines), while ensuring compliance against multiple specifications for other processes (from both Ford and SiriusXM).

### **ImpactRaise** Software Developer

April 2020-June 2021

I worked on a Ruby on Rails application designed to provide an online investment portal as a white-label software service for start-up accelerators to manage their own offerings. I developed RESTful API connections with third party vendors including IDology, Docusign, Plaid, and FundAmerica to facilitate a smooth investor experience. I set up AWS services for uploading images and other content to start-up offerings and configured serving them over Amazon Cloudfront.

### **Symantec** Software Development Intern

June 2019-August 2019

I helped maintain the Norton Secure Login service while carrying out database migrations and developed backend functionality for a portal to give clients direct access and control over managing their own whitelisting preferences for the login service.

### **CROMA Lab** Undergraduate Researcher and Programmer

August 2018-January 2019

The CROMA Lab leverages human input through crowdsourcing and machine learning to try and solve technical problems. I worked in designing a platform that could leverage standard algorithms as well as human feedback to visual input from a HoloLens MR headset which could automate computationally difficult aspects and assist a user with guided instruction.

### **MDA Autonomous Quadcopter** Designer and Programmer

January 2018-December 2018

I worked in a jointly sponsored University of Michigan and MDA co-op team to develop an autonomous mobile sensor system for a quadcopter designed to track remote RF beacons, identify targets at the scene of a beacon, and relay back coordinates and a video stream. I oversaw and engineered the full development of the initial navigation, RF system implementation, and design choices behind evaluating the algorithms necessary to effectively hone in on the target with high confidence and in a short time window.

### **University of Kiel, Germany** Programming Intern

June 2017-August 2017

Worked on a platform in an ion source chamber controlled by 6 stepper motors and a phyMotion embedded system. I identified bugs and created a guide to circumvent faulty controls in order to reduce the operation time of the chamber. Additionally, I wrote a program that computed the necessary operations for the convenient measurement system I created.

## LEADERSHIP EXPERIENCE

### **Eagle Scout in Boy Scout Troop 206, Menlo Park, CA**

October 2008-September 2014

I worked with administrators at a nearby under-resourced school district to install a mural of the United States and a "Peace Path" program at their elementary school for the purpose of teaching students how to cooperate in resolving conflicts and help prevent bullying. Additionally, I organized a community-wide drive to dispose of paint in an environmentally-friendly manner.