# **Alec Ross Fenichel**

https://github.com/fenichelar https://linkedin.com/in/fenichelar ±1 (407) 760-0036 fenichelar@gatech.edu

## **Objective**

Obtain an internship position offering mechanical, electrical, and/or programming experience for Summer 2016.

#### **Education**

### Georgia Institute of Technology (Atlanta, GA)

Jun '11 - present

Pursuing Bachelor of Science in Mechanical Engineering

Pursuing Bachelor of Science in Computer Science

Expected Graduation: May 2017

**Honors Program** 

## **Technical Experience**

## BMW Group - **R&D Engineer Intern** (Munich, Germany)

Aug '14 - Dec '14

- Worked on small team to develop and test prototype for use in future cockpit of automated vehicles
- Developed GUI using MATLAB to monitor and control prototype via UDP in real time for dynamic simulator testing
- Created electrical system and software for controlling linear actuator with pulse width modulation using C
- Created custom PCB Arduino shield and software for recording feedback with force sensitive resistors using C

### Alpha Epsilon Pi Zeta Chapter - Webmaster (Atlanta, GA)

May '14 - Dec '14

- Developed internal website using Drupal CMS and Pydio for managing users and internal documents
- Integrated Georgia Tech's LDAP database with user management system and utilized CAS servers for authentication

# McKenney's, Inc. - Information Technology Intern (Atlanta, GA)

May '14 - Aug '14

- Diagnosed and resolved technical issues related to hardware and software
- Developed automated system for sharing files with contractors via FTP using HTML, JavaScript, PHP, and batch

## Georgia Tech IEEE - Webmaster (Atlanta, GA)

Aug '11 - May '14

- Developed new website using HTML, CSS, JavaScript, and PHP
- Placed in IEEE SoutheastCon Website Competition every year 1st Place (2014), 1st Place (2013), 3rd Place (2012)

#### General Electric Aviation - **Software Engineer Intern** (Cincinnati, OH)

May '12 - Aug '12

- Developed software for first dual core jet engine controller using SCADE qualified C code generator
- Created automated tool for gathering and analyzing licensing server data using Perl, VBA, and batch
- Created project tracking system to quickly identify problematic deadlines using VBA

#### Georgia Tech IEEE - Innovation Team Technical Lead (Atlanta, GA)

Aug '11 - May '12

- Designed object detection system for competition robot using infrared, ultrasonic, and tactile sensors
- Programmed movement algorithms for advanced line following using BASIC and C

### **Skills**

Programming: C, Java, MATLAB, LabVIEW, JavaScript, SQL, HTML, CSS, Unix shell, VHDL, assembly

Software: Git, Autodesk AutoCAD, Autodesk Inventor, Microsoft Office Suite

Platforms: Windows XP/Vista/7/8, Mac OS X, Ubuntu

Manufacturing: Soldering, table saw, miter saw, band saw, drill press, router, mill, lathe

#### **Projects**

## Resume Generator - <a href="https://github.com/fenichelar/resume">https://github.com/fenichelar/resume</a>

Mar '15 - present

• Tool for creating resume by compiling JSON content and HTML layout using JavaScript, ¡Query, and Handlebars

# Arduino Pin Library - <a href="https://github.com/fenichelar/Pin">https://github.com/fenichelar/Pin</a>

Dec '14 – present

• Arduino library for fast digital I/O using port register manipulation written in C++

# Leadership Experience

## Georgia Tech - Creative Decisions and Design Assistant (Atlanta, GA)

Aug '15 - Jul '15

Supervised and assisted students with machining and LabVIEW programming

## Georgia Tech Housing - Harrison Hall Peer Leader (Atlanta, GA)

Aug '12 - Dec '12

• Worked with freshman to facilitate and develop a community environment within Harrison residence halls

#### Georgia Tech - Freshman Seminar Team Leader (Atlanta, GA)

Aug '12 - Dec '12

• Mentored group of new students in their transition to college life at Georgia Tech