

# **Aaron Fox**

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**OBJECTIVE** 

Second Computer Engineering/Science Co-op Position

January 2 – May 4, 2018

**EDUCATION** 

Bachelor of Science in Computer Engineering/Computer Science
Master of Engineering in Computer Engineering/Computer Science

J.B. Speed School of Engineering, University of Louisville, Louisville, Kentucky

Responsible for 100% of tuition

GPA 3.957/4.0 Hours Completed: 90

Expected May 2020

**High School Diploma** 

Randall K. Cooper High School, Union, Kentucky

May 2016 **GPA 4.6/4.0** 

**SKILLS/COURSEWORK** 

**Technical Skills/Relevant Coursework** 

C, C++

Web Development – Node JS

Java

MongoDB

• C#, Unity

Python

SQLHeroku

MATLAB

Selenium

TensorFlow/Keras

Android Development

VIM/IntelliJ/Visual Studio

Embedded Systems

JSON/XML

**APPLIED EXPERIENCE** 

#### **Course/Volunteer Projects:**

**Global Mamas Volunteer**: Volunteered in Ghana for an NGO and helped create and update databases for the NGO's HR system using SQL and C#.

**C/C++**: Interfaced Arduino circuitry and code with a self-constructed windmill to perform calculations and display output to LCDs. (See <a href="www.github.com/aaronfox/ENGR-111-Arduino-Windmill-Display">www.github.com/aaronfox/ENGR-111-Arduino-Windmill-Display</a>.)

**Independent Projects:** 

Personal Website and Blog. Used MongoDB, ExpressJS and NodeJS. (See www.aaronfox.me)

Unity Game Development: Created a 3D shooting game with intelligent AI enemies

Reflection: Puzzle game created using Unity2D. (see www.github.com/aaronfox/Reflection)

**Redbird Robotics:** Developed on drones using the Robot Operating System library (ROS) for flight control and sub team integration as team captain of our school's robotics team.

**Hackathons:** 

**Hack The Hill (WKU)**: Placed third by creating a bot that directly contacts and replies to representatives and senators, advocating for Net Neutrality. (see <a href="https://www.github.com/aaronfox/Net-Neutrality-Bot">www.github.com/aaronfox/Net-Neutrality-Bot</a>)

**VandyHacks (Vanderbilt University)**: Created a Virtual Reality escape room game using the Unity Gaming Engine for Oculus Rift, making sure to include plenty of memes.

**RevolutionUC (University of Cincinnati)**: Created a fan hub based off the podcast *Hello Internet*, which included games such as "CGP Grey Flappy Bird" and "Podcast Bingo." (see <a href="www.hellointernetbingo.com">www.hellointernetbingo.com</a>.) **CatHacks 3 (University of Kentucky)**: Competed in the Gatton Fintech Challenge and created a web app called "Decentral," a micro-lending loans prototype. (see <a href="www.github.com/aaronfox/Decentral">www.github.com/aaronfox/Decentral</a>.)

**WORK EXPERIENCE** 

#### **Johns Hopkins Applied Physics Laboratory**

May 2018 - June 2018

Technical Aide Intern – 40 hours/week

Laurel, MD

- Researched and programmed neural networks and deep learning using TensorFlow and Keras.
- Performed experimental infrared analysis using MATLAB
- Worked and developed on an embedded BeagleBone system

# **Great American Insurance Company**

June 2016 - August 2016

DevOps Intern – 40 hours/week

Cincinnati, OH

- Developed service to improve Health Dashboard UI for code complexity using Java Code Coverage.
- Learned best development practices from sources such as Pluralsight and Safari Books Online.
- Headed a Code Kata presentation demonstrating a basic workflow with Docker Hub.

• Participated and explored activities and events such as daily scrums, sprint planning, and retrospectives using the Scaled Agile development framework.

Reach Ambassador August 2017 - Present

General School Ambassador

Louisville, KY

• Mentoring seventy first year CECS students and guiding them through their first year of college.

#### **ACTIVITIES/HONORS**

Co-Captain and Technology Manager, Redbird Robotics, June 2017 – present

- Won second place in the International Aerial Robotics Competition at Georgia Tech in 2017
- Communicated with aerial robotics drone using the Robot Operating System (ROS)
- Used team version control to integrate all the sub-team's work

# Louisville Makes Games!, January 2017 - Present

- Participating in workshops and meetups to learn collaborative indie game development.

# Member, Association for Computing Machinery (ACM), August 2016 - present

- Participating in the Hacking Student Interest Group

**Tau Beta Pi** Engineering Honor Society, December 2017 – Present (*limited to top 1/8<sup>th</sup> of junior class*) **Brown Fellows Program**, June 2016 – Present

- One of UofL's premier full scholarships which includes two world travel enrichment projects.
- Created independent project in Ghana working with an NGO to assist their SQL database needs.

**Phi Delta Theta**, Active fraternity member

Valedictorian, Randall K. Cooper High School

Freshman LEAD, August 2016 - June 2017

- Engaged in community events and developed leadership skills.
- Initiated and carried out a Clinton Global Initiative Project with my team through Uspiritus.

Kentucky Governor's Scholar Program Alumnus

Team Captain, High School Baseball and Basketball Teams, Cooper High School, May 2015 - May 2016