

EDUCATION

Bachelor of Science in Computer Engineering/Computer Science Expected May 2020
Master of Engineering in Computer Engineering/Computer Science Expected May 2021
J.B. Speed School of Engineering, University of Louisville, Louisville, Kentucky **GPA 3.963/4.0**
Responsible for 100% of tuition Hours Completed: 90

High School Diploma May 2016
Randall K. Cooper High School, Union, Kentucky **GPA 4.6/4.0**

SKILLS/COURSEWORK

Technical Skills/Relevant Coursework

- C, C++
- C#, Unity
- Java
- MongoDB
- Web Development – Node JS
- Linux
- SQL
- Heroku
- MATLAB
- Python
- 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 their 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. (github.com/aaronfox/ENGR-111-Arduino-Windmill-Display.)

Independent Projects:

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

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

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

Redbird Robotics: Developed on drones using the Robot Operating System library (ROS) for flight control and implemented each sub-team's integration as technology co-captain of Louisville's robotics team.

River City Rocketry: Leading Payload team's effort on designing an autonomous drone that serves as payload for a launched rocket.

Hackathons:

Hack The Hill: Placed third by creating a bot that directly contacts and replies to representatives and senators, advocating for Net Neutrality. (github.com/aaronfox/Net-Neutrality-Bot)

VandyHacks : Created a Virtual Reality escape room game using the Unity Gaming Engine for Oculus Rift.

RevolutionUC: Created a fan hub based off the podcast *Hello Internet*, which included games such as "CGP Grey Flappy Bird" and "Podcast Bingo." (github.com/aaronfox/Hello-Internet.)

CatHacks 3: Competed in the Gatton Fintech Challenge and created a web app called "Decentral," a micro-lending loans prototype. (github.com/aaronfox/Decentral)

WORK EXPERIENCE

Johns Hopkins Applied Physics Laboratory May 2018 - August 2018
Technical Aide Intern – 40 hours/week Laurel, MD

- Researched and programmed neural networks/deep learning networks using TensorFlow and Keras.
- Performed experimental infrared analysis using MATLAB.
- Worked and developed on an embedded BeagleBone system in a Linux environment.
- Obtained Secret security clearance.

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 – May 2018

School Ambassador and Computer Engineering Student Mentor

Louisville, KY

- Mentored seventy first year CECS students and guided them through their first year of college.

ACTIVITIES/HONORS**Co-Captain and Technology Manager, Redbird Robotics**, June 2017 – August 2018

- Won second place in the International Aerial Robotics Competition at Georgia Tech in 2017
- Communicated with all sub-teams through Slack, meetings, and task managing systems
- Used team version control to integrate all the sub-team's work

River City Rocketry, Payload Team Member, August 2018 - Present

- Leading efforts toward development of autonomous drone for the 2019 mission

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 1/8th of junior class*)**Brown Fellows Program**, June 2016 – Present

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