UNIVERSITY OF LOUISVILLE®

J.B. SPEED SCHOOL OF ENGINEERING

Aaron Fox

Permanent: [Please ask. I would not like to post this publicly online], Burlington, KY 41005
Local: [Please ask], Louisville, KY 40208
Phone: [Please ask], **email:** aaron.fox@louisville.edu
Website: www.aaronfox.me **GitHub:** https://github.com/aaronfox

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: 119
	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
- MATLAB
- Python
- Heroku
- Linux
- SQL
- 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: Lead Payload team's effort to design an autonomous drone that served 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, May 2019-August 2019
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.

FacilityONE Technologies, LLC   January 2019 – May 2019
Development Team Intern – 40 hours/week   Louisville, KY

- Contributed toward database migration from MSSQL Server to MySQL and PostgreSQL.
- Worked on various bugs and feature requests under an Agile environment.
- Wrote extensions for and debugged Electron apps.
- Updated front-end codebase from Google Polymer 1.0 to 3.0.
- Worked with Python Pyramid.

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