SARAH BROWN

Computer Engineering Student

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sarahbrown.github.io

EDUCATION

M.S. in Electrical and Computer Engineering **University of Oklahoma** Expected May 2022 Norman, OK

B.S. in Computer Engineering **University of Oklahoma** 2017 – Fall 2021 Norman, OK **GPA: 3.90**

B.A. in Mathematics **University of Oklahoma** 2017 – Fall 2021 Norman, OK **GPA: 3.90**

Study Abroad **OU @ Oxford** Summer 2018 Oxford, UK

Associates of Science **Lone Star College** May 2017 Houston, TX **GPA: 4.0**

SKILLS

Hardware Design:	FPGA, Verilog, Altium Designer, EAGLE, KiCad, Multisim
Platforms:	ESP32, Arduino, Raspberry Pi, mbed, Linux, Windows
Programming:	Python, C, C++, Java, R, Matlab, OpenCV, Pytorch, Tensorflow
Other:	Blender, Git

WORK EXPERIENCE

University of Oklahoma **Teaching Assistant** Fall 2020 - Present Houston, TX

- Worked remotely as a teaching assistant for a digital design course in the ECE department
- Developed lab code for ESP32 modules so students could complete lab remotely and supervised lab sections while providing debugging help

Gecko Robotics **Electrical Engineering Intern** Summer 2020 Houston, TX

- Worked remotely as an electrical engineering intern at Gecko Robotics
- Developed methods to contactlessly detect defects on tank floors while learning about laser scanning and computer vision

INVOLVEMENT

Sooner Competitive Robotics **President (April 2020 – Present), Secretary (April 2019 – April 2020)**

- Leader in an organization of 30+ students in the mission of building winning robots
- Organized events on campus for outreach and recruiting

Mercury Team Captain(May 2019 – March 2020)

- Lead a team of 20 students on different subteams toward competing in a telecommunications robotics challenge
- Worked with members to develop autonomous subroutines
- Implemented technology to correctly identify an object emitting a 10 Hz pulse among four different objects

Mercury Electrical Subteam Lead (August 2018 – April 2019)

- Designed and implemented the necessary electronic subsystems for a competitive robot
- Constructed electrical systems architecture of ground based mobile robot

Women in Electrical and Computer Engineering **President (2019 – Present), Vice President (April 2018 – 2019)**

- Planned activities and events for students in the college of Electrical and Computer Engineering
- Focused on outreach to and retainment of women within these majors and taught skills necessary to excel in classes

HAM Radio **2012 – Present**

- Earned highest level HAM Radio license (Extra)
- Ran the Get On The Air station which introduces newcomers to HAM radio

PROJECTS

Honors Research Internship **Summer 2020 – Present**

- Worked with a professor on search and rescue robotics research
- Focused on generating a current state of the art report and developing a project proposal for a multi-student project

HONORS & AWARDS

ECE Directors Service Award ECE Outstanding Leadership Award ECE Distinguished Mentor Award
Girl Scouts Bronze, Silver, and Gold Awards National Merit Scholar