

Emberlynn McKinney

Rock Hill, SC 29732 • embermckinney.com

(803) 450-4315 • foremberlynn@gmail.com

Tooling Skills

Languages

Python, Java, C, C++, and Rust

Haskell, Fortran, and Matlab

Verilog and SystemVerilog

HTML5 and LaTeX

Other Skills

Robotic Systems Design

Linux System Administration

Bash Scripting

Hardware Verification

Education

University of South Carolina (Columbia, SC)

August 2014–August 2018

Completed 124 credits toward Computer Engineering BSE

Relevant Coursework

CPU Design

Robotics

Embedded Systems

Mechanics of Solids

Signals and Systems

Numerical Modeling

Circuits

Data Struct. & Algo.

Electromagnetism

Computer Networks

Differential Equations

Operating Systems

Experience

Deli Clerk

Jun 2021–

Publix Super Markets

Fort Mill, SC

- Ensure customers feel welcomed and listened to in the deli.
- Provide traditional deli service and sub sandwich service to customers.
- Maintain a clean and sanitary food preparation environment.

Systems Developer

Aug 2018–Dec 2020

Dauway Robotics

Columbia, SC

- Integrated and tested a mapping and navigation system for wheeled robots.
- Created project timelines and managed codebase and ticketing systems.

Multiple Positions

Jun 2015–Sep 2019

University of South Carolina

Columbia, SC

Systems Developer

Sep 2018–Sep 2019

Resilient Systems Laboratory

- Implemented a landmark SLAM system using new sampling technologies.
- Created project timelines and managed codebase and ticketing systems.

Research Assistant

Mar 2017–Sep 2018

Resilient Systems Laboratory

- Developed firmware and networking software for indoor drone flight.
- Developed servo controller drivers and designed drone hardware.

Research Assistant

Jan 2016–Sep 2017

Autonomous Field Robotics Laboratory

- Debugged the adaptation of application code into a multi-robot coverage library.
- Wrote tests and simulations using said library to aid lab researchers.
- Improved reliability, modularity, communications, and programming flexibility of an autonomous kayak (see Coastal Processes and Sediment Dynamics Lab below).
- Managed lab documentation systems, and created early documentation of the kayak.

Research Assistant

Jun 2015–Nov 2015

Coastal Processes and Sediment Dynamics Lab

- Designed, fabricated, tested, and documented an autonomous kayak.
- Developed power systems, radio systems, and microcontroller integration.

Software Developer Apr 2018–Sep 2018 Absion Technologies Columbia, SC

- Researched and developed novel AI video compression technologies.
- Developed and assisted in the low-level design of low-power stream processors.

Software Intern Mar 2015–Nov 2015 Swampfox Technologies, Inc. Columbia, SC

- Automated aspects of telephony application design.
- Wrote transformation scripts for data to streamline testing and communication.