

Brendan McGuire

brendan@bren.app • (864) 520-9321

<https://bren.app>

<https://github.com/MayorMonty>

<https://linkedin.com/in/bmmcgui/>



Education

Clemson University

Bachelor of Science, Computer Science

Graduate May 2023

GPA: 3.93 / 4.00

- President of Clemson VEXU Robotics, a 501(c)(3) not-for-profit organization affiliated with University that facilitates competitive robotics teams and K-12 outreach programs. Led a team of 10 developers in developing a C++-based codebase, including path tracking, smart error detection, and advanced sensor utilization.

Experience

Boeing

Clemson School of Computing Capstone Internship

September 2022 – Present

Clemson, SC

- **Technologies:** Node.js, Next.js, HTML, CSS, JavaScript, Tailwind
- Created and programmed hardware devices to maintain temperature for Cold Storage Volume in parallel with Boeing's existing development.
- Integrated microcontroller with sensors and compressor to maintain temperature specifications
- Developed custom web interface to control and monitor hardware devices remotely

Epic Systems

Software Development Intern

May 2022 – August 2022

Verona, WI

- **Technologies:** TypeScript, React, C#, Microsoft SQL Server, ChakraUI, @airbnb/visx, d3.js
- Created a customizable dashboard used by hospital IT administrators to see an overview of their deployment of Epic Software
- Designed and optimized SQL Stored Procedures to quickly highlight statistics about the deployment of up to 250,000 machines and notify users about metrics beyond thresholds
- Implemented abstraction to allow developers to quickly create customizable, drag-and-drop cards with visualizations to highlight metrics.

Clemson Energy Visualization & Analytics Center

Software Engineering Intern

May 2021 – January 2022

Clemson, SC

- **Technologies:** TypeScript, React, Next.js, React Native, Node, OracleDB, Microsoft SQL Server, Git, Lerna, Next.js, Tailwind, Framer Motion, Docker
- Developed cross-platform data collection system to gather end-user thermal preference data quickly
- Integrated with building control systems to pair thermal preference data with building and outside conditions
- Incorporated with Machine Learning Pipeline to deploy a custom recommendation system for users.

Robotics Education and Competition Foundation

Event Support Specialist

September 2021 – Present

Dallas, TX (Remote)

- Supports educators hosting competitive robotics events throughout South Carolina
- Provides on-site technical support, rules clarifications, and conflict resolution furthering nonprofit mission to increase STEM engagement for K-12 students
- Division Manager for the VEX Robotics World Championship

Clemson University School of Computing

Lead Undergraduate Teaching Assistant

January 2021 – Present

Clemson, SC

Projects

tm-obs-switcher (JavaScript, Node.js)

Livestream automation for robotics tournaments, integrating with OBS and ATEM to change the program scene when matches start automatically.

Source:

<https://go.bren.app/tm-obs>

CSS (Rust)

A fully featured CSS parser and minifier written following the W3C CSS Syntax Module Level 3 specification.

Source:

<https://go.bren.app/css>

See more projects on GitHub: <https://go.bren.app/github>