

RYAN MCGEE

SOFTWARE / ROBOTICS ENGINEER

✉ ram6064@rit.edu 🌐 ryanmcgee.dev ☎ 540-903-3552 📍 Stafford, VA 🌐 in ryan-mcgee-b5820b175 🌐 superrm11

Searching for a robotics / software internship Summer 2023

EDUCATION

Rochester Institute of Technology

Bachelor of Science in Robotics and Manufacturing Engineering Technology

Aug. 2018 - May 2024

EMPLOYMENT

CACI - Software Intern - Dahlgren, VA

(18 Months)

2019 - 2021

Wrote scripts to secure Red Hat systems, and to interpret and automatically modify Ada code

UI design with JavaFX, data structures and networking with C++, database management with Postgres, PCAP processing and replaying network data

ITW Hartness - Controls Intern - Greenville, SC

(7 Months)

May 2022 - Dec. 2022

Wrote ladder logic on Allen Bradley PLCs for Dynac accumulation systems with the integration department. Developed electrical drawings in AutoCAD for custom robotic palletizer systems, and gained experience with fieldwork at customer sites

SKILLS

PROGRAMMING: Java, C/C++, Bash, Git, Allen Bradley PLC

FRAMEWORKS: OpenCV, JavaFX, ESP-IDF / FreeRTOS

LINUX: Arch, Red Hat, Debian

CAD: Autodesk Inventor, Solidworks, KiCAD

HARDWARE: 3D Printing, Robotics, Mechanical design, PCB Design

PROJECTS

3D Printed Robots

<https://ryanmcgee.dev/projects>

Sept. 2017 - Current

Raspberry Pi / ESP32 powered, Bluetooth controlled, holonomic drive systems using custom mechanical, electronics and software designs.

G2MIDI Hackathon Project

<https://github.com/superrm11/G2MIDI>

Feb. 2022

A software program to interpret guitar notes in real time and convert them to any electronic instrument as a MIDI device

VEX Robotics Core API

<https://github.com/RIT-VEX-U/Core>

Apr. 2020 - Current

A custom open source API for easily managing mobile robotic subsystems and utilities, such as odometry, feedback controllers and state machine controllers.

ACTIVITIES

Computer Science House, Member

RIT Special Interest House (SIH) program, centered around learning computer science

Aug. 2018 - Current

RIT VEXU Robotics Team, Software Lead

A robotics team that creates two mobile robots for a game released each year, and competes against other universities. Currently managing the GitHub organization's 5+ active repositories with code reviews, pull requests and wiki maintenance

Aug. 2018 - Current

VOLUNTEERING

RIT High School Vex Competition, Host and MC

February 2019, 2020 and 2022

First Robotics Team 339, College Mentor

Helped teach high school students how to program in java for robotics applications

May 2018 - 2021