# RYAN MCGEE

# SOFTWARE / ROBOTICS ENGINEER

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Searching for a robotics / software internship Summer 2023

# **EDUCATION**

### **Rochester Institute of Technology**

Aug. 2018 - May 2024

Bachelor of Science in Robotics and Manufacturing Engineering Technology

# **EMPLOYMENT**

#### CACI - Programming Intern - Dahlgren, VA

2019 - 2021

(18 Months)

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

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

LINUX: Arch, Red Hat, Debian CAD: Autodesk Inventor, Solidworks

HARDWARE: Soldering, 3D Printing, Robotics, Mechanical design

# **PROJECTS**

**3D Printed Robots** Sept. 2017 - Current

https://ryanmcgee.dev/projects

Raspberry Pi / ESP32 powered, Bluetooth controlled, holonomic drive systems

**G2MIDI Hackathon Project** Apr. 2022

https://github.com/superrm11/G2MIDI

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

**VEX Robotics Core API** Apr. 2020 - Current

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

A custom open source API for easily managing robotic subsystems and utilities

## **ACTIVITIES**

Computer Science House, Member Aug. 2018 - Current

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

RIT VEXU Robotics Team, Software Lead Aug. 2018 - Current

A robotics team that creates two mobile robots for a game released each year, and competes against other universities

## VOLUNTEERING

RIT High School Vex Competition, Host and MC

February 2019, 2020 and 2022

First Robotics Team 339, College Mentor

May 2018 - 2021