




# ISAAC INGRAM


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## OBJECTIVE

To find a part-time position in embedded software development or related fields

## EDUCATION

BS Computer Science | [Rochester Institute of Technology](#)

 August 2022 - December 2026

 Rochester, New York

Coursework in Mechanics of Programming, Statistics, Discrete Mathematics, and Differential Equations

## WORK EXPERIENCE

Software Engineering Co-Op | [Collins Aerospace](#)  May 2023 - Present

- Write low-level libraries and drivers to support avionics application development
- Communicate with other avionics equipment through standards such as MIL-STD-1553
- Create scripts to automate documentation tasks, boosting team productivity

Embedded Systems

Avionics

Requirements Management

## PROJECTS

SproutChaperone |  [IsaacIngram/SproutChaperone](#)

- Display the current moisture level of plants on an adjacent LCD
- Report data to a remote server for long-term logging
- Display data through an intuitive DataDog dashboard

C++

Arduino

DataDog

TruckFood |  [IsaacIngram/TruckFood](#)

- Webscrape information on local food trucks from RIT's website
- Send that information to Slack through the Slack API

Python

Selenium

Rapid React Robot

 [CommandoRobotics/FRC\\_Rapid\\_React\\_2022](#)

- FIRST Robotics Competition robot awarded the **Innovation in Control Award**
- Use computer vision for localization and automated targeting using computed projectile mechanics
- Use complex control algorithms to ensure accurate path following and safe control of other mechanical systems

Java

Arduino

Computer Vision

PID

Feedforward

## LANGUAGES

C

Java

Python

## TECHNOLOGIES

VXWorks

LynxOS

Git

MIL-STD-1553

Subversion

Jama

DOORS

## ACTIVITIES

Computer Science House

 [csh.rit.edu](#)

- 3D Administrator  January 2023 - Present
  - Manage and repair 3D printers
  - Assist other members in designing, slicing, and manufacturing 3D printed parts
- Member  August 2022 - Present
  - Living-learning community focused on sharing technical skills and knowledge

FIRST Robotics

 [firstinspires.org](#)

- Team Captain  September 2021 - March 2022
  - Schedule and run meetings
  - Ensure everything comes together in a timely manor
- Lead Programmer  September 2020 - March 2022
  - Manage codebase to ensure working code is constantly available
  - Organize and complete programming tasks to meet overarching project timeline
  - Teach new students to code