# RISHAB **SESHADRI**

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#### **EDUCATION:**

## **UNIVERSITY OF GEORGIA, FRANKLIN COLLEGE OF ARTS & SCIENCES**

BACHELOR OF COMPUTER SCIENCE IN COMPUTING 2026

- Emphasis in Robotics and Software Design
- GPA: 3.87 / 4.00

#### WORK EXPERIENCE AND VOLUNTEERING:

## LEAD DEVELOPER AND QA LEAD, UI DYNAMICS

MARCH 2020 - JANUARY 2022

AUGUST 2022 - PRESENT

- Assisted and partially led the creation of HTML/CSS or WordPress websites as per the customer's requests and expectations
- Assured the quality of the finished product by testing all features, checking for bugs
- Worked with front- and back-end developers to patch any issues, modelling the website as needed

## INTERN DEVELOPER, GEORGIA STATE UNIVERSITY

MAY 2020 - AUGUST 2020

- Assisted in the planning of a project with Professor Ashwin Ashok and other students at GSU to improve AI object detection in cars to detect and avoid crashes
- Worked with the team to develop a smaller model of a real-life environment to test a model car
- Sketch and build the models necessary for testing the car with all road signs and environments necessary

#### TROOP GUIDE, NATIONAL YOUTH LEADERSHIP TRAINING

NOVEMBER 2018 - MAY 2019

- Manage and lead a group of 15 scouts through the 1-week camp session
- Deliver several presentations on leadership, team building, and presentation skills to groups of 50+ youth scouts

## **EXTRA CURRICULAR EXPERIENCE:**

#### **DRIVETRAIN PROGRAMMER, UGA ROBOTICS: IEEE**

AUGUST 2022 - PRESENT

- Build and program a robot to compete in the Institute of Electrical and Electronics Engineers Southeast Conference
- Implement programs in Python and Java such as a pathfinding algorithm, object detection, and a collection system for game elements on the field
- Plan and 3D model the robot, research necessary documentations, and directly process motor input with an Ubuntu system using a Raspberry Pi 4

#### ALGORITHM DIVISION PROGRAMMER, UGA ROBOTICS: PROSTHETIC ARM

AUGUST 2022 – PRESENT

- Work with a team of other programmers to code and build a prosthetic arm using object-oriented programing and version control (Git)
- · Work with the Dynamixel documentation in C and Java to create PID, path-finding, and other algorithms to mimic the human hand
- Design solutions, such as search algorithms, to maximize efficiency in storage and in processing speed on an Arduino

# MENTOR AND CO-PRESIDENT, FRC AND FTC ROBOTICS

APRIL 2016 – PRESENT

- Lead, manage, and guide the 60+ members of the Alpharetta Robotics Club and its 4 teams, seeking sponsorships, organizing events
- Work with the club's financial board to keep the club and teams well-funded and running by finding sponsorships, budgeting, and maximum funding
- Mentor new members, assisting with programming (Java with FTCLib, object detection and PID system), electrical, and mechanical training

#### RESEARCH LEAD, ARTIFICIAL INTELLIGENCE CLUB

SEPTEMBER 2019 - MAY 2022

- Learn and teach Python with libraries such as OpenCV for object detection, image processing, and more AI oriented subjects
- Research and plan new topics to teach projects include a PID-controlled drone, object detection for self-checkout, and more

# **PROJECTS:**

### THE INREEL: PASTEVEN

JANUARY 2023 – PRESENT

- PyQt6 based application designed to be an elevated drawing application with additional features that are not commercially available and customizable – current work in progress
- Current goals: Improve features such as border detection and continue developing from list

# GRISELDA MIXBOARD

AUGUST 2022 – PRESENT

- JavaFX based application that allows a user to record and upload audio clips, connecting each clip with a key on the keyboard to allow for real-time
  playing, beat mixing, and more
- Current goals: add an equalizer to the audio clips as well as a trim feature

#### **TECHNICAL SKILLS:**

- LANGUAGES: JAVA, PYTHON, C, JAVASCRIPT, HTML/CSS
- OPERATING SYSTEMS: WINDOWS 11, LINUX (FEDORA, UBUNTU), UNIX, MACOS
- UTILITIES: SCENEBUILDER, EMACS, GIT BASH
- LIBRARIES: JAVAFX, PYQT6, OPENCV (IN PROGRESS)