

ANTHONY MUI

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OBJECTIVE: Summer 2023 internship

Research interest: NLP, NLU, NLG, AI/ML

EDUCATION

Bachelor of Science, Computer Science

Rose-Hulman Institute of Technology Terra Haute, IN

Minor: Artificial Intelligence, Japanese

May 2025

GPA: 3.26/4.00

May 2025

Relevant Coursework: Natural Language Processing lab, Linear Algebra & Differential Equations, Data Structures & Algorithms

EXPERIENCE

ROSE-HULMAN ACADEMIC ASSISTANT | Terre Haute, IN

Jan 2022 – Present

- Create internal tooling using a bash script to automate grading processes.
- Set up online ubuntu server automatic grading system.
- Wrote a custom Tokenizer and chat GPT to check student's code.

NLP LAB | Terre Haute, IN

Jan 2022 – Present

- Language models, Text processing, Summarization, Prompt injection

Referrals:

- Dr. Olga Scrivner scrivner@rose-hulman.edu

SKILLS

Programming Languages: Python, Java, SQL, C, C++, JavaScript, TypeScript, HTML, CSS, Bash, GD Script

Frameworks: Hugging face, OpenCV, NLTK, Pandas, Keras, numpy, TensorFlow, PyTorch, Linux/Unix, Git, Docker, Node.js, Godot, ROS, Unity, Microsoft Office, Latex, Excel, firebase

Soft Skills: Fluent in Chinese, Beginner-level Japanese

Organizations: RoseTech Radio Club Member, Rose-Hulman RoboMasters CV Sub-team Leader

PROJECTS

YOLOv8 REAL TIME OBJECT DETECTION FOR | Python

Mar 8, 2022

- Developed a real-time object detection system for RoboMasters to find and move a robot to hit fast-moving panels <https://github.com/RHIT-Robomasters/CV-AI>
- Utilized YOLOv8, OpenCV, and ROS integration.
- Implemented an end-to-end real-time inference pipeline including:
 - Filtering raw image data and feeding it to the model for inference
 - Fusing depth camera data with image data to localize the detected object.
 - Creating an algorithm for projectile math
- Utilized a variety of techniques with OpenCV, including HSV filtering, blob detection, region of interest, perspective transform, adaptive Gaussian filter, convolution matching, and edge detection.
- Implemented real-time image processing for image detection on Nvidia Jetson Xavier NX
- Able to detect rapidly moving and rotating objects.
- Self-taught to lead the computer vision sub-team for the RoboMasters robotics team.

• Utilized **WEBSITES | FLASK, VUE, TYPESCRIPT, JAVASCRIPT, HTML, CSS, SOCKET.IO** Jun 17, 2021

- Node JS Multiplayer Card Game <https://github.com/agmui/unstable-unicorns>
 - Implemented sockets connection and server to client communication.
 - Implementing user authentication with firebase database
- Robomasters website
 - Tailwind for styling
 - Firebase hosting and Firestore for user authentication and storage

OTHER PROJECTS

- Robomasters Game
- Boids: bird flock simulation
- KD trees collision detection
- C internet socket, shell, scheduler: low-level understanding of OS
- Pi pico CAN BUS development