



Rahul Medicharla

Student at The Ohio State University

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SKILLS

- Building dynamic applications utilizing React, Ruby, .NET, SQL, Docker, and cloud services such as GCP and Azure.
- Experience in creating and integrating image recognition and Neural Network models using YOLOv8, PyTorch, and OpenCV.
- Proficient in JavaScript, Python, Java, C#, and C.
- Experience in developing products while following Agile methodologies and software development life cycles.

EDUCATION

The Ohio State University, Columbus OH

Bachelors of Science | Computer Science Engineering

Focus: Software Development / Artificial Intelligence

Graduation: May 2025

GPA: 3.7/4.0

EXPERIENCE

Software Engineering Intern at WillowTree

May - August 2023

- Lead the creation of an end-to-end MVP for a 24/7 customer support chatbot by using the React framework, collaborating with a cross functional team of developers and designers, and by following Scrum methodologies.
- Implemented a fast semantic search and response feature to enhance the customer experience by cutting down the response times from the customer service team by at least 30% through the use of large language models, vector embeddings, and an Azure SQL database.
- Engineered and deployed a custom backend web API leveraging Azure Cloud Services, .NET framework, and C#.

Application Developer Intern at TOYMAKERS

June - August 2022

- Developed a mobile application to improve the user experience for campus event organization utilizing the React Native framework which resulted in 100 weekly active users in a test group.
- Implemented a live GPS tracking system to simplify the event planning process by displaying the locations of key friends, events, and establishments using Google Cloud Platform's Realtime Database, Firestore, Places API and the Redux JS Toolkit.

COLLEGIATE AFFILIATIONS

Tech Leader of Google Developer Student Clubs, The Ohio State University

November 2023 - current

Co-Founder/Co-President/Treasurer of OSU's Cooking Club

August 2022 - current

3D Perception Team Member of GM-SAE Autodrive Challenge II / Buckeye Autodrive

January 2023 - current

- Currently developing a multi classification image recognition ML model using YOLOv8 and OpenCV to identify different types of traffic lights from a real-time camera feed on an autonomous vehicle while also minimizing model response latency.
- Created and integrated a custom 3D Dynamics module to get the real time speed, direction, and orientation of surrounding vehicles relative to our vehicle's velocity, location, and orientation to true north using a linear regression model.

PROJECTS

evolute

June 2023

- Engineered a custom data structure to seamlessly switch between different search algorithms and data structures such as linked lists, hash maps, and binary search trees to maximize efficiency based on a user's behavioral patterns.
- Created and trained a custom PyTorch Neural Network to automatically determine when to switch implementations based on behavioral patterns such as insertion and deletion frequencies, search predictions, and search randomness.

mood.ai

March 2023

- Developed and hosted a custom Docker contained python API on GCP that allows users to convert memories stored as videos to abstracted art through the use of audio and video machine learning models and generative AI.
- Implemented numerous inference models such as YOLOv8 object detection and speech recognition to parse data about that media and utilized large language and stable diffusion models to reconstruct the data as abstracted art.

Audio Studio - 5th place project out of 1,000 participants at annual Hackathon

October 2022

- Created a speech-to-code editor that inputs conversational voice commands and outputs runnable python code.
- Designed a nested recursive CFG representation of code logic and used Google's Speech Recognition for voice transcription.