

DIYA KINI

Austin, TX | (512) 944-3923 | [Email](#) | [Portfolio](#) | [GitHub](#) | [LinkedIn](#)

EDUCATION

University of Michigan

B.S.E in Computer Science, Robotics

Ann Arbor, MI

2023 - 2026

- Societies: EV & Mobility Scholar, Amazon's Women of the World, Live Más Scholar, Adobe Student Ambassador
- Relevant Coursework: ROS, Data Structures & Algorithms, Artificial Intelligence, Computer Vision, Web Systems

EXPERIENCE

Lockheed Martin

Software & Artificial Intelligence Engineer Intern

Remote

May 2025 - Present

- Applied 3 temporal deep learning models (STGCN, GAT, TGN) in Python to analyze aircraft trajectory data, conducting experiments with labeling, Docker and Podman containerization, CI/CD, and agile development
- Created an Genesis AI assistant to automate the process of software engineers retrieving UCI message entity translations for internal customers through Python scripting, web scraping, and GitLab API, saving ~\$27,000 per employee and boosting engineer efficiency by 300% with a 1:1 replacement for clientele query processes
- Constructed a Python WebSocket communication layer to interface with a C++ Open Mission Systems (OMS) server, enabling CAL compatibility and facilitating seamless integration with next-generation avionics platforms

University of Michigan Robotics – The MBot Ecosystem

Computer Vision Research Assistant

Ann Arbor, MI

Jan 2024 - May 2024

- Led autonomous robotic development for 100+ vision-controlled robots in 2 courses, impacting 40 graduate students
- Applied mathematical operations to Python, OpenCV, and computer vision algorithms to facilitate distance learning
- Enhanced the Jetson Nano's stereo vision implementation within the MBot ecosystem through ORB SLAM

University of Michigan College of Engineering

Computational Linear Algebra Instructional Aide

Ann Arbor, MI

Jan 2024 - Present

- Executed matrix operations and linear transformations to optimize LiDAR data interpretations in robotic navigation
- Taught 200+ students the application of ML concepts, including linear regression and classification, to create predictive models for robotic systems, enhancing pattern recognition and decision-making processes
- Explained feedback control algorithms for dynamical systems, leveraging linear algebra and Julia programming

Berry Consultants, LLC

Data Science Intern

Austin, TX

June 2022 - Aug 2022

- Analyzed optimal length of time a novel gene therapy would keep hemophilia patients at a safe level of clotting
- Expedited the FDA approval of 2 treatments by investigating the relationship between biomarkers of the gut biome and clinical outcomes for an innovative treatment for C-difficile infections through the R programming language

PROJECTS

AlphaZero for Othello (Reinforcement Learning & MCTS)

Mar 2025

- Developed an AlphaZero-inspired reinforcement learning agent for Othello using PyTorch and Monte Carlo Tree Search (MCTS) to train policy and value networks through self-play, optimizing exploration parameters to improve win rates by 37% against baseline minimax agents and demonstrates strong generalization across unseen board states

Medical Liquid Dispenser (CV & Robotics)

Feb 2025

- Integrated computer vision and MediaPipe Hands into an automated liquid dispenser for real-time gesture-based control, achieving 95% hand recognition accuracy and enabling hands-free operation with 86% reliability

AI-Powered Crisis Test Line (Python)

Nov 2024

- Built an AI triage system using TensorFlow-based sentiment and emotion classification with tokenization, lemmatization, and word embeddings to predict message urgency in real time, improving accuracy by 33% and reducing simulated counselor response latency by 40% through a Flask-powered triage dashboard

SKILLS

Licenses & Certifications:

TensorFlow Professional Developer Certificate (DeepLearning.AI),
Quantitative Modeling for Analysts Specialization (Wharton Online)

Programming Languages & Computer Skills:

Python, C++, R, Java, Solidworks, Julia, OpenCV, ROS, MATLAB, Verilog