DIYA KINI

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EDUCATION

University of Michigan **Ann Arbor, MI**
B.S.E. Computer Science, Robotics *2023 - 2027*

- Societies: EV & Mobility Scholar, Amazon's Women of the World, Live Más Scholar, Adobe Student Ambassador, Dean's List, Women's Glee Club, Kappa Theta Pi Fraternity, Kappa Delta Sorority, Girls in Electrical Engineering and Computer Science
- Relevant Coursework: Data Structures & Algorithms, Artificial Intelligence, ROS, Computer Vision, Web Systems, Statistics

EXPERIENCE

Apple Inc. **Austin, TX**
Software Engineer Intern May 2026 - Aug 2026

- Deployed an automated root cause analysis (RCA) system across Dynatrace, Kubernetes, and Splunk, extending it with a request-level distributed tracing pipeline for AWS EKS clusters, reducing manual RCA investigation from ~3 hours to 6 minutes
- Engineered a native macOS app (Swift/SwiftUI) integrating IAM token auth and live LDAPS queries against Apple's corporate directory to auto-resolve manager identity, dynamically rendering role-based checklists across 5 job categories and 40+ setup steps, and automating manager-notification workflows, condensing onboarding into a ~30-45 minute guided session

Lockheed Martin **Remote**
Artificial Intelligence Intern May 2025 - Jan 2026

- Built STELLA, a production-grade LLM-powered AI agent that automates UCI message-to-entity mapping retrieval and translation using Python, GitLab API, and web scraping, reducing manual lookup by 75% and saving ~$27k per employee
- Implemented and evaluated three temporal deep learning models on synthetically generated trajectory data, designing experiments to compare performance, stability, and generalization and enabling model benchmarking across multiple scenarios
- Developed reproducible ML infrastructure using Docker, Podman, and CI/CD pipelines in an Agile development environment
- Built a Python WebSocket communication layer to interface with a C++ Open Mission Systems (OMS) server, supporting low-latency, real-time data exchange between AI services and next-generation avionics systems for reliable message handling

University of Michigan College of Engineering **Ann Arbor, MI**
Computational Linear Algebra Instructional Aide Jan 2024 - Present

- Guided 200+ students in applying linear algebra and numerical methods to robotics and perception tasks, including LiDAR point-cloud processing and sensor modeling; instructed with Python, Julia, eigendecomposition, and matrix modeling techniques

University of Michigan Robotics **Ann Arbor, MI**
Computer Vision Research Assistant Jan 2024 - May 2024

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

Berry Consultants, LLC **Austin, TX**
Data Science Intern June 2022 - Aug 2022

- Assisted in 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 data analysis and the R programming language
- Applied statistical modeling and exploratory data analysis to support regulatory and clinical decision making practices

PROJECTS

Robot Interprocess Exchange – Distributed Messaging Framework (C++) *Oct 2025*

- Developed a fault-tolerant publish/subscribe framework in C++ that supports dynamic registration and low-latency topic streaming; formulated TCP transport, message framing, async spin loops to enable inter-node communication

Intsa485 – Full-Stack Web Application *Nov 2025*

- Built a dynamic Instagram-style web application using RESTful APIs and a React front end; implemented infinite scroll, real-time likes/comments, authentication, and session management; deployed and maintained a system on AWS EC2

AlphaZero for Othello – Reinforcement Learning & MCTS *Mar 2025*

- Developed an AlphaZero-inspired learning agent for Othello using PyTorch and Monte Carlo Tree Search (MCTS), training joint policy and value networks through self-play; tuned exploration and rollout parameters, optimized training stability, and achieved a 37% win-rate improvement over baseline minimax agents, demonstrating strong generalization across unseen board states

SKILLS

ML Frameworks & Tools: LLMs, AI Agents, Retrieval-Augmented Generation (RAG), Time-Series Analysis, Reinforcement Learning, AI Planning, Prompt Engineering, Agile Development TensorFlow, PyTorch, Docker, Podman, CI/CD, OpenCV, REST APIs

Programming Languages & Computer Skills: Python, C++, SQL, R, Java, Linux, Kubernetes (EKS), Flask, React, ROS, AWS