David Dina

608-575-9374 · David05.dina@gmail.com
1066 Acker Lane, Verona, WI 53593

Education

B.A. Computer Science, University of Minnesota, Duluth — Aug 2024- May 2028
Object-Oriented Programming & Design, Data Structures and Analysis, Discrete Structures, Probability & Statistics, Calc-Based Physics, Calculus II
CS-GPA 3.5

Experience

IT Intern, Roundhouse Marketing — Verona, Wisconsin — April 2023 - April 2025
- Developed and maintained client websites, implementing responsive designs, and optimizing performance
- Led implementation of new features based on client requirements, improving overall user engagement. Identified and resolved production code bugs, enhancing product stability and reducing support issues
- Worked across multiple programming languages to deliver all types of functional solutions
- Worked on and maintained the in-house server

Official Contributor, ElizaOS — https://elizaos.ai — Summer 2025 - Current
- Identified and resolved runtime fixes to improve the core Agentic Systems functionality of ElizaOS.
- Created extensions of system functionalities through custom plugin development that are now available for public use.
- Collaborated with other developers in the open-source community to contribute to a next-generation operating system.

Student Coding Mentor, Verona Area High School — Verona, Wisconsin — December 2022 - June 2023
- Mentored K-4 students in coding fundamentals using platforms like Code.org.
- Guided students in understanding programming logic and debugging techniques.
- Provided one-on-one assistance to students to help them solve problems.
- Received positive feedback from students for making learning enjoyable.

Host/Server Trainee, Monks Bar and Grill — Verona, Wisconsin — Spring 2021 - Summer 2022
- Providing customer service in a fast-paced restaurant environment.
- Managing guest seating and reservations.
- Maintaining efficient restaurant flow.

Team Member, Team Wisconsin (Hockey) — Spring 2019 - Spring 2021
- Selected to compete on a premier, statewide travel team representing top hockey talent from across Wisconsin.
- Collaborating with team members to achieve collective goals.
- Demonstrating leadership and communication in high-pressure situations.

Projects

AI-Powered Prosthetic Hand — Summer 2025 - Current
- Architected a prototype for an affordable, AI-driven prosthetic hand, integrating MyoWare EMG muscle sensors with a Jetson Orin Nano for real-time gesture recognition.
- Developed a machine learning pipeline using Convolutional Neural Networks (CNNs) and Long Short-Term Memory (LSTM) models to classify processed EMG signals into precise motor commands.
- Implemented signal processing techniques, including hardware-level shielding and software-based filters, to reduce noise and improve the accuracy of EMG signal acquisition.

Decoupled Intrinsic-Extrinsic LLM Training — June 2025 - Current
- Developing a novel training architecture to address the trade-off between LLM creativity and safety by decoupling intrinsic curiosity and extrinsic alignment.
- The architecture is inspired by the HiDDeN model and will use a two-component system: an "intrinsic encoder" to generate thought vectors and an "extrinsic decoder" to translate them into safe outputs.

Music.AI — June 2023 - August 2024
- Architected and developed an AI application that uses user-requested AI vocal inference to transform song renditions into various styles.
- Led a team of developers in managing UI/UX design and outreach efforts to improve user engagement and project visibility.
- Designed and implemented scalable backend systems and conversion algorithms to process user requests and produce audio outputs efficiently.

Technical Skills

Languages: Python, JavaScript, Java, HTML, CSS, C++, C, Golang, Visual Basic

Technologies: React, Next, Node, Express, Flask, TensorFlow, Pytorch, (Q)LoRA, Pandas, NumPy, Matplotlib, MongoDB, Firebase, SQLite, Postgres, Redis, Docker, AWS, Git, Git bash, Supabase, JVM, Transformers, Linux, Windows, MacOS