

Daniel Mallett

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EDUCATION

University of Tennessee

Bachelor of Science in Computer Science, GPA: 4.00

Knoxville, TN

Aug. 2022 – May 2025

Miami University

Bachelor of Science in Mechanical Engineering

Oxford, OH

Aug. 2015 – Dec. 2019

EXPERIENCE

Undergraduate Research Assistant

Dec. 2023 – Present

TENNLab Neuromorphic Computing Lab

Knoxville, TN

- Conducted research on brain-inspired AI in neuromorphic computing, training spiking neural networks for control applications and data classification tasks using evolutionary optimization algorithms.
- Contributed to the development and maintenance of C++ applications within the TENNLab software framework for simulating spiking neural networks on custom neuromorphic hardware.
- Developed a specialized video generation tool using SFML and FFmpeg to evaluate the performance of spiking neural networks on live, event-based camera feeds for object classification.

Teaching Assistant - Discrete Math

Aug. 2024 – Dec. 2024

University of Tennessee

Knoxville, TN

- Provided in-depth instruction during office hours on foundational discrete mathematics concepts including combinatorics, set theory, graph theory, and mathematical proof techniques.
- Partnered with the professor to develop and refine course material, providing detailed feedback on technical accuracy, question clarity and solution completeness to ensure optimal student learning outcomes.

Fullstack Software Development Intern

Aug. 2022 – Dec. 2023

University of Tennessee

Knoxville, TN

- Developed a state-wide emergency check-in system for over 40,000 students and staff, enhancing security protocols and reducing emergency call volume by 10%.
- Contributed to a new ticketing system for university facilities maintenance using Angular and .NET.
- Utilized Azure DevOps and Git for version control and collaboration, streamlining software delivery.

Project Manager

Feb. 2020 – May 2021

Schneider Electric

Pleasanton, CA

- Managed execution of 30+ projects across residential, commercial, and industrial sectors, collaborating with manufacturing teams, electrical distributors, and logistics partners.
- Reviewed specifications and electrical plans to ensure alignment with timelines, technical specifications, and regulatory standards.
- Led project closeout activities, including financial reconciliation, installation verification, and post-shipment support.

PROJECTS

Raspberry Pi Chat Server

- Developed a multi-threaded chat server in C for Raspberry Pi, enabling clients to connect and exchange messages over a local network via Netcat.

AI Pomodoro Timer <https://ai-pomodoro.netlify.app/>

- Collaborated with a team to build a web-based pomodoro timer app with a digital assistant powered by OpenAI's GPT-4.
- Implemented secure user authentication and account creation with Auth0 and Google Cloud Platform.
- Deployed a RedwoodJS application using Netlify for hosting, with a PostgreSQL database managed via Prisma and GraphQL on Railway.

TECHNICAL SKILLS

Languages: C++, C, C#, JavaScript, HTML/CSS, Python, Swift

Frameworks: React, .NET, RedwoodJS, SFML, SwiftUI

Tools: Git, GitHub, Azure, VIM, VS Code, Visual Studio, Linux