Daniel Mallett

Nashville, TN | dmallett9@gmail.com | linkedin.com/in/danielmallett | github.com/daniel-mallett

Experience

Software Engineer I May 2026 – Present
Ambition (YC W14) *Nashville, TN*
Junior Software Engineer *May 2025 – May 2026*

- Serve as the team's AI subject-matter expert and a full-stack engineer on a Django/React enterprise sales platform, owning LLM feature development end to end (AWS Bedrock, LangChain, Pydantic AI).
- Designed and shipped the platform's first agentic AI assistant, enabling customers to query sales data and generate reports via natural language, directly contributing to over $1M in deal and renewal value.
- Established the company's first LLM evaluation practice — benchmark datasets, an automated evaluation framework, and LangSmith online agent monitoring — ahead of a major 2.0 platform relaunch.
- Diagnosed and stabilized production agent regressions following the 2.0 relaunch, resolving a surge of customer-reported bugs and restoring response quality.
- Led developer-tooling adoption across a 2M-line Python codebase, rolling out Ruff and Ty static analysis with CI enforcement and building codebase-specific agent skills to improve AI coding-tool effectiveness.

Undergraduate Research Assistant Dec. 2023 – May 2025
TENNLab Neuromorphic Computing Lab *Knoxville, TN*

- Built and maintained C++ and Python applications in the TENNLab software framework for training and simulating spiking neural networks on custom neuromorphic hardware.
- Built a benchmarking application for evaluating spiking neural networks on nonlinear dynamical systems.

Fullstack Software Development Intern Aug. 2022 – Dec. 2023
University of Tennessee *Knoxville, TN*

- Developed a statewide emergency check-in system for 40,000+ students and staff, reducing emergency call volume.
- Implemented Angular UI components and .NET API endpoints for a facilities maintenance ticketing system.

Customer Project Specialist Feb. 2020 – May 2021
Schneider Electric *Pleasanton, CA*

- Managed execution of 30+ customer electrical-infrastructure projects, coordinating manufacturers, distributors, and logistics partners from specification review through closeout.

Projects

Brainshape | *Python, LangGraph, TypeScript/React, MCP* | github.com/daniel-mallett/brainshape

- Built a desktop knowledge-management app in which an LLM agent reads, writes, and links markdown notes over a local knowledge graph with hybrid keyword and semantic (vector-embedding) search.
- Exposed the agent's tool suite via an MCP server for use by external agents and coding assistants.

Open Source | Upstream bug-fix PR to langchain-ai/langmem — LangChain's long-term memory library

Technical Skills

Languages: Python, C++, TypeScript/JavaScript
AI & LLMs: LangChain, LangGraph, LangSmith, Pydantic AI, AWS Bedrock, agentic tool use, LLM evaluation, MCP
Web & Data: Django, React, PostgreSQL, ClickHouse
Infrastructure & Tooling: AWS, Docker, CI/CD, Ruff, Ty

Education

University of Tennessee, Knoxville — B.S. in Computer Science, *Summa Cum Laude* May 2025
Miami University — B.S. in Mechanical Engineering Dec. 2019

Publications

NAP: Neuromorphic Artificial Pancreas | *C. P. Rizzo,* ***D. Mallett****, et al. — ICONS 2025 (ACM)*

- Trained personalized spiking neural networks as control algorithms for automated blood glucose regulation, outperforming reinforcement learning baselines while minimizing power consumption for edge deployment.
- Awarded first place among 500+ submissions at UT's undergraduate research exhibition (EURēCA).