Ethan Miller

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EDUCATION

Grand Valley State University

Grand Rapids, Michigan

Bachelor of Computer Science

August 2020 - December 2023

• GPA: 3.83

PROFESSIONAL EXPERIENCE

Gordon Food Service

Grand Rapids, Michigan

Lead Full Stack Conversational AI Designer

Dec 2024 - Present

- Architected and deployed and internal digital assistant that integrates multiple AI agents, enabling sales representatives to track truck ETAs, manage case sales data, and retrieve purchase order details, among additional features. This initiative increased sales capacity by the equivalent of 40 full-time employees.
- Developed a Help Desk Support Agent for Google Chat that resolves inquiries and seamlessly escalates complex issues to a live agent.
- Established and led a Chatbot Acceleration Program, onboarding and mentoring two new Full Stack Conversation Designers. This effort strengthening the team's conversation design expertise and project delivery capacity.
- Designed and implemented a voice agent using Dual-Tone Multi-Frequency (DTMF) and conversational AI deployed in front of customer service and CTS, handling customer ETA inquiries with a smooth escalation path to a human agent.
- Presented bi-monthly at IT Town Halls, communicating updates on the Chatbot Acceleration Program and general developments in the AI space to leadership and stakeholders.
- Conducted user studies and provided actionable insights that directly informed the strategic roadmap for conversational AI agents.

Digital Product Specialist

Jan 2024 - Dec 2024

- Enhanced Python-based ETL processes by incorporating an environment field and project field, enabling targeted filtering and more robust analytics across in-house and hosted platforms.
- Created hybrid conversational flows that merge generative AI with standard conversation design best practices, delivering advanced and tailored user experiences.
- Wrote Engaging chatbot copy and refined conversation flows, prompted generative AI to produce accurate, well-formatted responses where necessary.
- Collaborated with cross-functional teams to gather stakeholder requirements and provide scheduled analytics updates, ensuring alignment with business goals.

Digital Solutions Intern

May 2023 – Jan 2024

- Improved natural language understanding (NLU) and communication strategies for AI virtual assistants, which increased conversation
 quality and user satisfaction.
- Analyzed customer needs and linguistic patterns to preemptively address common inquiries and ensure positive virtual agent interactions.
- Implemented system logic and functions within conversation flows, working collaboratively with developers to integrate new APIs.
- Architected a conversational AI agent from scratch to save \$41,600 annually for an internal team based on the capacity created.

PROJECTS

GVSU Real Estate Club Web App:

- Developed a full-stack web application using React (frontend) and Node.js (backend) to streamline internal club communications
- Integrated Firestore NoSQL database, enabling non-technical club members to update content independently using an Admin UI.
- Established RESTful API calls to automatically sync Firestore data in real time, keeping content up to date and consistent.

Voxel Game Engine (C++/OpenGL):

- Engineered a dynamic voxel terrain engine in C++ using OpenGL for texture rendering, integrating vertex and fragment shaders for texturing and lighting.
- Implemented Perlin noise for realistic terrain heightmaps and normal maps, creating varied landscapes and surface features.
- Boosted performance by incorporating frustum culling, back-face culling, and occlusion culling to efficiently manage rendering.

TECHNICAL PROFICIENCIES

Languages: Python, C++, JavaScript, C#, Java, SQL, HTML/CSS, Terraform

Web & Frameworks: React, Angular, NextJS, Node.js

Cloud & DevOps: Google Cloud Platform, Docker, GitHub/GitLab, Gradle

AI & Conversation Design: Voiceflow, Conversational Agents/Dialogflow CX/ES, Figma Additional Tools: Jira, Postman, OpenGL, Unity, Lookerstudio, Neo4j, BigQuery, Firestore