# **Ethan Miller**

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#### **EDUCATION**

# **Grand Valley State University**

Grand Rapids, Michigan

August 2020 – December 2023

Bachelor of Computer Science

■ GPA: 3.83

**Gordon Food Service** 

## PROFESSIONAL EXPERIENCE

Grand Rapids, Michigan

Full Stack Conversational AI Designer

Dec 2024 - Present

- Created and deployed an internal digital assistant integrating multiple agents to track truck ETAs, managing case sales data, parse customer
  prospect details, and retrieve purchase order statuses for Sales Representatives. Increasing sales capacity by the equivalent of 40 full-time
  employees.
- Developed a Help Desk Support Agent to support inquiries via Google Chat, including seamless escalation to live agents for complex issues.
- Established and led a Chatbot Acceleration Program, onboarding and mentoring two new Full Stack Conversation Designers, strengthening the team's conversation design expertise and project delivery capacity.
- Implemented a voice agent using DTMF and Conversational Agents to handle customer service call inquiries, with optional escalation 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, identifying and providing key insights that informed the strategic roadmap of conversational AI agents.

Digital Product Specialist

Jan 2024 - Dec 2024

- Enhanced Python-based ETL processes by incorporating an environment field, enabling targeted filtering and more robust analytics across inhouse and hosted platforms.
- Created hybrid conversational flows merging generative AI with standard conversation design best practices, delivering advanced and tailored user experiences.
- Wrote Engaging chatbot copy and conversation flows, prompting generative AI to produce accurate, well-formatted responses.
- 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 startegies for AI virtual assistants, increasing conversation quality and user satisfaction.
- Studied 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 alongside developers to integrate webhook data seamlessly.
- Created a virtual agent from scratch to cut response times and save \$41,600 annually for an internal team.

#### **PROJECTS**

GVSU Real Estate Club Web App:

- Developed a full-stack web application using React (frontend) and Node is (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 and reduce unnecessary draw calls.

### **TECHNICAL PROFICIENCIES**

Languages: Python, C++, JavaScript, C, Java, SQL, HTML, 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