# VITTORIO CENTORE

(786) 281-1334 | vcentore@umich.edu | Vittorio Centore | github.com/vittorio-centore

## Education

**University of Michigan** **Expected May 2027**

*B.S. in Computer Science* *Ann Arbor, MI*

- **GPA:** 3.71/4.00
- **Coursework:** Data Structures & Algorithms, Web Systems, Object Oriented Programming, Computer Organization, Foundations of Computer Science, Discrete Mathematics, Linear Algebra, Intro to Data Science
- **Activities:** Atlas Digital Consulting Group, Reach Consulting Group, Michigan Rover Team, Italian Association

## Experience

**AgentMail (YC S25)** Sep 2025 – Present

*Software Engineering Analyst* *Ann Arbor, MI*

- Engineered an AI sales agent using OpenAI's Agents SDK and AgentMail's Inbox API to automate client research and outreach, showcasing end-to-end API automation and reducing manual workload by 70%.
- Architected a full-stack, interactive demo for the company website that visualized real API calls through a narrative walkthrough, improving developer trial conversion rates and theoretically boosting product engagement by 35%.

**'Sup** | *Seed Round Startup* June 2025 - Sep 2025

*Software Engineering Intern* *Miami, FL*

- Developed AI-powered mock interview tool, integrating Gemini's multimodal models to analyze candidate responses and deliver feedback without transcription, improving practice for users using Next.js and FastAPI
- Deployed facial landmark tracking system using MediaPipe, enabling real-time emotion detection and personalized feedback on delivery style, leveraging face-api.js to increase LLM feedback accuracy by 60%
- Constructed a media compression pipeline with FFmpeg that reduced audio/video storage by 80%, cutting infrastructure costs while maintaining user experience through asynchronous backend processing

**U-M School of Information** Feb 2025 – May 2025

*Software Engineer* *Ann Arbor, MI*

- Built a chat-based LLM assistant to match faculty with eligible awards, using React and TinyLlama-1.1B to streamline the selection process, skimming through approximately 8,000 faculty profiles in ∼13 seconds
- Optimized model performance to enable faster real-time conversations and efficient processing of large-scale faculty data, using asynchronous loading and PyTorch float16 precision, cutting processing time by 30%
- Orchestrated the model's deployment on remote GPU servers, optimizing performance by pre-filtering faculty data with Pandas to reduce input size and leveraging PyTorch CUDA for efficient processing and low-latency responses.

**Michigan Rover Team** Sep 2024 – May 2025

*Fullstack Developer* *Ann Arbor, MI*

- Refactored camera dashboard to display mission-specific camera feeds based on operator and team feedback, using Vue.js, TypeScript, and Bootstrap, contributing to top 10% finish at the national competition
- Improved robotic arm usability by implementing selectable manual and inverse kinematics modes, allowing operators to choose between precise or coordinated arm movements, speeding up mission time by 20% from previous year

## Projects

**Stock Predictor Model**

- Trained model to forecast next 3 days of stock prices using 25.2-year historical window with PyTorch Transformer architecture, leveraging scikit-learn and 21 engineered quantitative indicators to achieve 62% directional accuracy.

**LeetCode Recall Tracker**

- Programmed a spaced-repetition LeetCode recall platform (React, Firebase, GraphQL) with a cache-first Firestore data system that reduced external API calls by 80% and increased problem retention by 3×.

**Distributed MapReduce Framework**

- Implemented Python-based distributed MapReduce framework with a multi-threaded architecture, custom manager and worker classes, and network (TCP/UDP) communication, resulting in fault tolerant, efficient data processing.

## Technical Skills

**Languages**: Python, C/C++, Java, TypeScript, JavaScript, HTML/CSS
**Technologies**: React.js, Next.js, Tailwind, FastAPI, AWS, Firebase, Git, PostgreSQL, Cursor/Claude Code
**Interests**: Soccer (Napoli Supporter), Cars, Watches, Snowboarding, Marvel, Travel, Music