

THOMAS O. KANZ

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EDUCATION

Carnegie Mellon University

Bachelor of Science in Artificial Intelligence

Pittsburgh, PA

Expected May 2027

Selected Coursework: Introduction to Computer Systems, Matrices and Linear Transformations

Select Current Coursework: Introduction to Deep Learning, AI: Representation and Problem Solving

Warwick Valley High School

Warwick, NY

Valedictorian 105.41/100.00

Completed June 2023

Selected Coursework: AP Computer Science A (5), AP Computer Science Principles (*5), PLTW Cybersecurity (Distinguished),

Intro to Computer Science [Python]

SKILLS & ABILITIES

Programming Languages: Python, C, Java, JavaScript, HTML/CSS; Excel, Word, PowerPoint

Self-Taught Frameworks: FAISS API, OpenAI API, Streamlit API, Pinecone API, Next JS, React JS, MongoDB, Azure AI,

AWS, Fast API, Milvus DB, Linux

EXPERIENCE

GroundForce Capital Management – AI Research Analyst and Strategist

August 2024 – Present

- Responsible for conducting in-depth research on AI technologies and developing strategic recommendations for integrating external AI tools into GroundForce Capital's operations, focusing on enhancing efficiency and decision-making.

Assurifai – Founding AI/ML Engineer

May 2024 – July 2024

- Fine-tuned a custom machine learning model for extracting data from merged credit reports. Developed and deployed a RESTful API to manage concurrent requests to the ML service, successfully integrating it into the Assurifai backend.

PROJECTS

[Velroi Catalog](#) – AI & Semantic Search Course Catalog Project

July 2024

- Programmed a modern course catalog with semantic search capabilities and an LLM driven AI assistant that can automatically adjust search parameters using function calling.

[MeritAtlas](#) by Velroi – Scouts BSA Merit Badge Search Engine Service Project

May 2024

- Built and distributed semantic search Merit Badge search engine from start to finish as a volunteer service project.

2024 TartanHacks – Graduate Student Assembly Campus Experience Award Winner

Pittsburgh, PA

- Built [CarnegieGPT](#) an intelligent search tool for answering questions related to disparate course and dining databases.

2024 AI EarthHack Hackathon Participant – The GenAI Competition

Virtual

- Built a functional front-end and back-end generative AI filtering system to evaluate circular economy business ideas.

OTHER EXPERIENCE

Project Olympus Startup Incubator– Customer Discovery Kickstart Program Participant

Pittsburgh, PA

- Completed 20 customer discovery interviews to understand existing market problems related to course catalog software.
- Speaker at Project Olympus' Annual Show and Tell 2024 Event, where I presented my startup Velroi's problem/solution pitch.

Sigma Eta Pi Entrepreneurship Fraternity – Carnegie Mellon University

Pittsburgh, PA

Coed Professional Entrepreneurship Fraternity

January 2024 - present

- Responsible for completing customer discovery and building the MVP for my Founder's Education project team.

Scotty Labs – Carnegie Mellon University

Pittsburgh, PA

Labrador Committee: CMU Chatbot Team

September 2023 - present

- Scotty's Course Recommender won the 'Best Demo Award' at the Scotty Labs Labrador Committee Demo Day.

Scouts BSA - Troop 4038

Warwick, NY

Senior Patrol Leader (2021-2022); Webmaster (2019-2023)

February 2016 - June 2023

- Obtained highest rank of **Eagle Scout** by building eight outdoor Leopold benches for the Warwick Valley Humane Society.

SELECTED AWARDS

*Perfect Score on the 2022 AP CS Principles Exam, Earned Every Single Point Possible (Top 0.15% of Test Takers)

Valedictorian Award - Warwick Valley High School & Highest Four-Year High School Math, Science, and History Averages

AP Scholar with Distinction & NYS Seal of Biliteracy (Spanish)

National Hispanic Recognition Program Scholar & National Rural and Small Town Recognition Program Scholar

National Merit Scholarship Program Commended Student