Nyx Haile

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Education

Massachusetts Institute of Technology Cambridge, MA

B.S., Computer Science, B.S., Mathematics, Minor in Economics *Exp. Grad. May 2026*

Relevant Coursework:

6.009 (Python), 18.650 (Statistics), 18.600 (Probability), 6.006 (Algorithms), 18.06 (Linear Algebra), 18.701 (Algebra), 6.042 (Discrete Math), 6.S890 (Multiagent Learning), 18.404 (Theory of Computation), 14.01 (Microeconomics),

Experience

AI Developer December 2022 – July 2023

Vana *Remote*

- Organized the Vana X MIT Generative AI Hackathon, managing a $25,000 prize pool and coordinating logistics, outreach, and judging criteria, resulting in the participation of top-tier talent from the MIT community.
- Designed, developed, and rigorously tested a robust framework for hackathon participants, leveraging JavaScript and Python to create an efficient and scalable platform for generative AI development.
- Created a messaging applet in Swift utilizing the Vana API, integrating user-friendly functionalities while ensuring seamless interaction between backend and frontend components.
- Engineered advanced prompt generation techniques for AI-generated stickers, ensuring stylistic cohesion and optimizing the balance between creativity and functional output.

Research Mentor September 2023 – Present

The SHED *Cambridge, MA*

- Served as a key mentor in a cutting-edge, interdisciplinary makerspace, guiding research projects at the intersection of biocomputing, human-computer interaction (HCI), and personal transportation.
- Provided comprehensive technical training to laboratory staff on advanced equipment, ensuring compliance with safety protocols and optimizing experimental outcomes.
- Spearheaded the design and execution of innovative research methodologies, employing data-driven decision-making to solve challenges in increasing makerspace access
- Collaborated with interdisciplinary teams to advance research in computational models, machine learning applications, and data analytics, supporting the integration of quantitative techniques in experimental workflows.

Tech Lead December 2021 – April 2022

Bluehour *Cambridge, MA*

- Pioneered the design and development of core frameworks in designing and building the core frameworks for the Bluehour system, working directly with the founder to create scalable, decentralized solutions from the ground up.
- Authored smart contracts in Solidity to manage complex token burn/mint mechanics, enhancing system efficiency and contributing to Bluehour's overall token economy.
- Conducted in-depth analysis of user feedback from test runs, using data-driven insights to pivot development strategies, optimizing the platform for a more intuitive and engaging consumer-facing experience.
- Took on broad responsibilities, from design decisions to technical implementation, demonstrating versatility in a startup environment with a focus on rapid iteration and quantitative feedback loops.

Projects

Howtowin.lol | *Python, Redis, Svelte, OLAP DB* July 2024– Present

- Developing a vector matching algorithm to identify and compare gameplay metrics with similar past matches.
- Building a website in Svelte to display data and manage user logins,
- Designing data visualization tools to present insights and recommendations to users effectively

Technical Skills

Languages: JavaScript, Python, C/C++/C#, SQL (Postgres), Redis, HTML/CSS,
Frameworks: React, Node.js, Svelte, Flask
Developer Tools: Git, *NIX, Docker, Google Cloud Platform, VS Code, Visual Studio
Libraries: pandas, NumPy, Matplotlib, TensorFlow
Tools: Fusion360, Adobe Suite, Arduino