

Hazem Algendy

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EDUCATION

Northeastern University | Boston, MA

Sep 2023 – Present

Candidate for Bachelor of Science in Computer Science, 2027

Honors **Dean's List | 3.8/4.0 GPA**

Activities SEDS Lunabotics, Game Design Studio, IEEE, SEDS Astronomy

Coursework Object-Oriented Design, Algorithms & Data Structures, Computer Systems, Data Science Foundations, Cybersecurity Foundations, Database Design

TECHNICAL SKILLS

Programming Python, Java, Lua, JavaScript, TypeScript, SQL, HTML, CSS, React, C, C++, C#, x86

Technology Git, NumPy, Pandas, PyTorch, CUDA, Matplotlib, Seaborn, SciPy, MongoDB, Blender

Environment JupyterLab, PyCharm, VS Code, Eclipse, IntelliJ, Unity, Godot, Roblox Studio, Linux

WORK EXPERIENCE

Harvard Medical School

Jun 2022 – Oct 2022

Data Design Intern

Spaulding Rehabilitation, Motion Analysis Lab

- Processed motion data to improve exoskeleton ML models, cutting stroke rehab time by several weeks
- Leveraged **Matplotlib**, **Pandas**, and **NumPy** to analyze data trends, identifying inefficiencies
- Standardized anonymized patient gait recordings, enhancing **data analysis** and research documentation
- Redesigned sensor layout for Harvard and UMass Amherst professors, reducing data gaps and boosting prediction accuracy of **ML models** by 10%.

PROJECTS

Self-Revising Chatbot

Mar 2025

MimicGPT

Next.js, TypeScript

- Developed a **full-stack** AI assistant integrating OpenAI function calling and ElevenLabs voice synthesis
- Optimized **RESTful API** responses with self-revisions, improving reliability of cost-effective models
- Designed event-based file analyzer that delegates to a specialized summarizer, extracting writing style
- Engineered a persistent chat history **datastore** with multi-file uploads used in queries to MimicGPT

Crime Cleanup Game

Sep 2024 – Dec 2024

Mop Boss

Godot Engine, GDScript

- Led a team of **8 developers** to build a 3D collaborative multiplayer game by the semester's end
- Emphasized **scalable** and organized systems that facilitated our ability to procedurally generate levels
- Unveiled demo **on schedule** at Northeastern Fall Games Showcase, engaging playtesters and organizers

Massively Multiplayer Game

Aug 2020 – Jul 2021

Speed Simulator

Roblox Studio, Lua

- Engineered an efficient datastore for dynamically managing and displaying player points on a leaderboard
- Drove over **46M+** visits and millions of play hours with a scalable server-client architecture
- Designed and implemented unique monetization strategies, leading to over **\$10,000** in revenue