Hazem Algendy

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May 2025 – December 2025

Education

Northeastern University | Boston, MA   **May 2027 (Expected)**
Candidate for Bachelor of Science in Computer Science

Honors:	**3.8/4.0, Dean's List**
Coursework:	Object-Oriented Design, Algorithms & Data, Computer Systems, Data Science Foundations, Cybersecurity Foundations, Database Design, Computer Science Fundamentals I & II

Technical Skill

Programming	Python, Java, Lua, JavaScript, TypeScript, SQL, HTML, CSS, React, C, C++, C#, x86 Assembly
Technology	Git, NumPy, Pandas, PyTorch, Cuda, Matplotlib, Seaborn, SciPy, MongoDB, Blender
Environment	JupyterLab, PyCharm, VS Code, Eclipse, IntelliJ, Unity, Godot, Roblox Studio, Linux

Relevant Experience

Harvard Medical School   **Jun 2022 – Oct 2022**
Data Design Intern   *Spaulding Rehabilitation, Motion Analysis Lab*

- Processed motion data to train ML models for exoskeletons, improving stroke recovery and therapy efficiency
- Leveraged NumPy, Pandas, and Matplotlib to analyze data trends, identifying inefficiencies to further improve
- Reviewed and annotated motion capture recordings from patient trials, marking key frames to track gait stages
- Edited anonymized videos into a clear format, improving data analysis and ensuring clarity for the research team
- Presented findings to professors at partnered institutions, highlighting the need for a new organizational structure for accelerometer sensor groups (reassigning sensors from redundant limb areas to those with sparse training data)

Project Spotlight

Self-Revising Chatbot   **Mar 2024**
MimicGPT   *Next.js, TypeScript*

- Developed a full-stack AI assistant dashboard integrating OpenAI function-calling and ElevenLabs voice synthesis
- Optimized RESTful API requests with self-correcting iterative revisions, enabling reliable use of cheaper models
- Designed event-based file analysis which delegates to a specialized summarizer, increasing response accuracy
- 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 across different expertise (SFX, Programming, Level Design, Modeling, VFX), while maintaining communication through one-on-ones to address challenges and providing weekly progress updates
- Iterated consistently during the semester— on scripts and 3D assets— while balancing coursework
- Unveiled demo on schedule at Northeastern Fall Games Showcase, engaging playtesters with team-based mechanics

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
- Synthesized expansion map 3D assets, including trees, flowers, and rock formations, as an external developer
- Drove over 46M+ visits and millions of play hours by optimizing server-client architecture with scalable algorithms
- Designed and implemented unique monetization strategies, leading to tens of thousands in revenue

Interest & Language

Interest	Backpacking, Hiking, Rowing, Game Development, Autonomous Robotics, 3D Printing
Language	Native English, Advanced Spanish, Intermediate Arabic