

# Omar Abuhammoud

+1 (347)-362-2044 • [oabuhammoud@gmail.com](mailto:oabuhammoud@gmail.com) • [LinkedIn](#) • [GitHub](#) • [Portfolio](#)

## Education

### Cornell University, College of Engineering

Bachelor of Science in Computer Science, Dean's List

Ithaca, NY

Expected May 2026

**Related Coursework:** Algorithms, Data Structures, Artificial Intelligence, Machine Learning, Systems Programming, Object-Oriented Programming, Functional Programming, Linear Algebra, Statistics

## Experience

### Robotics Developer @ Cornell Cup Robotics Team

[Website](#) | February 2024-Present

- Developing a modular educational robot for nationwide school distribution that **enhances STEM education** with user-programmable controls and interactive features
- Engineering a lab assistant robot with voice recognition, object detection, and sentiment analysis, **enabling semi-autonomous task** completion
- Spearheading the development of a bipedal walking robot using **neural networks** for movement learning and enabling users to control the robot's actions through **VR integration**

### Software Engineer Intern @ Bloomberg LP

[Website](#) | June 2025-August 2025

- **Engineered** a C++ backend service in a microservices architecture to **reconcile state across multiple data sources**, enhancing consistency and reliability of enterprise communication workflows.
- **Integrated** external APIs, internal databases, and event-driven systems (Kafka, service-to-service RPC) to ensure accurate, **real-time synchronization** of user and room data.
- **Architected** automated validation pipelines, monitoring tools, and scheduled recovery workflows to proactively mitigate data or event gaps and **maintain system robustness**.

### Full Stack Intern @ Chapter One

[Website](#) | October 2024-November 2024

- Collaborated on an AI-driven platform that **generates customizable websites** for new businesses, enhancing digital accessibility and streamlining their online presence.
- **Optimized API performance**, implementing redundancy measures to ensure seamless data transfer, reliability, and faster response times.
- **Enhanced website personalization** by **incorporating custom effects** and **e-commerce capabilities**, allowing businesses to showcase products and sell services on their platforms.

## Projects

### Cloud-Based Note-Taking App, Capture

[Link](#) | August 2024-Present

- Developing a cloud-based note-taking app with a minimalistic design
- Engineering **scalable storage solutions** by integrating AWS for cloud storage and FastAPI for **efficient file handling**
- Implementing local storage features to ensure offline access and **synchronization** of notes

### Momentum Puzzle Platformer, Frostbitten

[Link](#) | January 2025-May 2025

- **Led** a 7-person development team, managing communication, **documentation**, and presentations to ensure smooth collaboration and delivery.
- **Engineered** core gameplay mechanics and **integrated** visual, audio, and design assets to deliver a cohesive and immersive player experience.
- **Orchestrated** sprint planning and task delegation, enabling the team to meet tight deadlines and exceed project milestones in an agile development environment.

### Image Recognition & Descriptions, Earthdex

[Link](#) | July 2024

- Created a real-life Pokédex application integrating TensorFlow for **image identification** and OpenAI for **dynamic descriptions**
- Developed a robust API to handle real-time image uploads and generate detailed information on identified images
- Designed and developed a user-friendly front-end for intuitive interaction with the application

## Skills

- **Back-end Development Tools:** Java, C, C++, Python, C#, OCaml, SQL
- **Front-end Development Tools:** HTML, JavaScript, CSS, React
- **Developer Tools:** Git, GitHub, AWS, Godot, Unity