Alexander Mcneilly

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EDUCATION

Massachusetts Institute of Technology (MIT)

Cambridge, MA

Bachelor of Science in Computer Science and Engineering

Expected May 2026

Relevant Courses: Data Structures & Algorithms, Python Programming, C and Assembly, Discrete Math, Linear Algebra Activities: SHPE, Latinos in Science and Engineering, MIT OpenCode, MIT Informatics Tournament, MIT Poker Club

Skills

Languages: C, C++, Java, JavaScript, Python, TypeScript, Kotlin, C#

Frameworks: React, Node.js, Express, Next.js, Three.js, MongoDB, PyTorch, NumPy, Pandas

Tools: Git, Unix/Linux, Android Studio, Figma, Jira, Docker, Kubernetes

Concepts: Object-Oriented Programming, Data Structures, Algorithms, Software Design Patterns, Testing

EXPERIENCE

MIT Electrical Engineering & Computer Science Department

Cambridge, MA

Sep 2023 – Present

Lab Assistant (Intro to Python Office Hours)

- Debug student submissions in office hours; evaluate student understanding by performing checkoffs
- Develop solutions and test cases for problem sets throughout the semester

Grao Venture Capital

Sao Paulo, Brazil

Analyst Intern

Jun 2023 – Aug 2023

- Implemented open-source decision analysis tools using VBA and Excel, improving due diligence processes
- Conducted market research on 54 generative AI startups, identifying opportunities for Brazilian startup ecosystem

2023 MIT Pokerbots Competition

Cambridge, MA

Software Engineer

Jan 2023 – Feb 2023

- Co-developed poker bot in Python (redesigned and optimized in C++) for MIT's annual poker bot competition
- Recognized by DRW Holdings for best risk to reward algorithm
- Placed Top 20 out of 200 Teams

Hack Ridge Hackathon

Park Ridge, IL

Software Engineer, President (2022)

Sep 2020 - Aug 2022

- Organized two 24-hour annual hackathons in the Chicago area, impacting over **400** students, through workshops, tech talks, and coding contests, securing **\$6,000+** in grants, prizes, and sponsorship
- Engineered a color blob detection Android app in Java/OpenCV; Built social mental health studying Android app in Java

Projects

Spatial Blocks [Ongoing] - TypeScript/JavaScript, Node.js, React, Three.js, Next.js

• Lead the development and design of a Scratch-like drag-and-drop 3D web development tool

Historic (AI Language History App) - React, TypeScript/JavaScript, Socket.io, Next.js, Tailwind CSS, OpenAI API

- Implemented 100% of AI chatbot functionality using OpenAI API
- Constructed UI/UX frontend design system and implemented it using Tailwind, Next.js, and Figma

Hygge: A Projection-Based AR Painting App – Processing, P5.js, JavaScript, HTML, CSS

- Co-developed an AR interactive motion capture painting app, for a Samsung-MIT Media Lab hackathon
- Utilized p5.js (Processing) and PoseNet pose detection to map user motion and paint strokes

Awards

2023 TEDxBoston Speaker – Presented TED Talk on intersection of Generative AI and Augmented Reality 2023 Citadel East Coast Datathon – Competed in Citadel and Correlation One's spring data science hackathon