# **Alexander Mcneilly**

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#### **EDUCATION**

## Massachusetts Institute of Technology (MIT)

Cambridge, MA

B.S. in Computer Science and Engineering, Minor in Mathematics

Expected 2026

Relevant Courses: Algorithms, Python Programming, C and Assembly, Discrete Math, Linear Algebra Activities: SHPE, Latinos in Science and Engineering, HackMIT, MIT OpenCode, Poker Club, MIT UPOP

## Skills

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

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

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

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

#### EXPERIENCE

## **MIT EECS Department**

Sep 2023 – Present

6.100A (Intro to CS using Python) Lab Assistant

Cambridge, MA

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

Grao VC

Jun 2023 – Aug 2023

Sao Paulo, Brazil

Analyst Intern

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

# Hack Ridge Hackathon

Sep 2020 - Aug 2022

Park Ridge, IL

President (2022), Software Engineer

- 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 (GitHub) [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

- Developed interactive language studying app with AI historical figures for 2023 HackMIT hackathon
- Implemented OpenAI chat functionality; Oversaw UI/UX frontend design and implementation

SupaNotes – React, TypeScript/JavaScript, HTML/CSS

• Built a personal dynamic, Markdown-supported, note-taking app for self-studying purposes

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
2023 MIT Pokerbots Competition – Won Nintendo Switch as DRW's prize for Highest Sortino Ratio for custom Pokerbot
2021 MIT MathRoots Certification – Participated in a mathematical talent accelerator hosted by MIT Math Department