

Noah Brauner

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EDUCATION

HARVARD COLLEGE

Cambridge, MA

Concentration: Computer Science and Applied Math

Expected May 2029

Relevant Coursework: CS20: Discrete Math, CS50: Intro to Computer Science, Math 21b: Linear Algebra

Activities: Harvard AI Group Technical Director, Club Men's Ultimate Frisbee (A team)

NOBLE AND GREENOUGH SCHOOL

Dedham, MA

Cumulative GPA: 4.0/4.0 | SAT: 1570

May 2025

Awards: Computer Science Prize (2025), Excellence in Technical Theatre (2025), Service in CS (2022, 2024)

WORK EXPERIENCE

TIDEPPOOL

Boston, MA (remote)

Software Engineering Intern

Summers 2023, 2024

- Conceived and developed module for rapid meal entry for an FDA-approved automated insulin-dosing app (Loop), now used by 20,000+ daily users, built with SwiftUI, CoreData, HealthKit, and comprising 5,000 lines of code
- Created an iOS 14+ widget, enabling app users to monitor their blood sugar and insulin levels from their home screen with realtime updates, built with SwiftUI and WidgetKit
- Reviewed code and participated in daily stand-ups as part of a team of 5 full-time professional software engineers

APPIER LLC

Boston, MA

Owner and Software Developer

August 2020-Present

- Developed and published multiple apps (social, puzzle, and utility) with over 7,000 downloads across 50+ countries on the Apple App Store, built with UIKit, SwiftUI, and Google Firebase

PROJECTS

NOBLE AND GREENOUGH SCHOOL APP

- Single-handedly wrote a large-scale application from scratch, with 40+ screens, 25k+ lines of code, and 800 daily users, integrating with the Veracross student information APIs and interfacing with MySQL and AWS databases

MACHINE LEARNING PNEUMONIA DETECTION APP

- Trained a convolutional neural network (CNN) that achieved 91% accuracy in pneumonia diagnosis and integrated it into an iOS app using the CoreML framework

REINFORCEMENT LEARNING FOR FORMAL MATH PROOFS

- Designing and implementing a reinforcement learning architecture combining a policy LLM, translator model, and formal proof verifier (Lean) to fine-tune theorem-proving reliability and reduce hallucinated proofs (in progress)

SKILLS

PROGRAMMING LANGUAGES

- Swift - Created multiple original apps; 6 years experience, 75k+ lines of code across personal projects
- Python - Developed multiple AI models with PyTorch and Keras and created a blockchain system from scratch
- Java - Wrote and deployed code for Nobles' 2022 FTC robot, advancing to Massachusetts state championship
- C - Maintained older iOS codebases reliant on C for audio algorithms, wrote image filter and edge detection algorithms

SOFTWARE SKILLS

- Git - Deployed code, collaborated on open-source and proprietary repositories
- Network/Cybersecurity - Employed internet proxies, intercepted web requests, and pentested using Burp Suite

VOLUNTEER EXPERIENCE

JDRF RIDE TO CURE DIABETES

Summers 2019, 2022, 2024, 2025

- Raised over \$35,000 for JDRF, won Best Young Rider award after cycling 100 miles