

# Biya Brook

(301)569-1206 | [bbrook@stanford.edu](mailto:bbrook@stanford.edu) | [in LinkedIn](#) | [GitHub](#)

## Education

### Stanford University - Stanford, CA

June 2028

B.S. in Computer Science w/ AI Concentration & B.A. in Linguistics

Relevant Coursework: Math 51 - Linear Algebra, Multivariable Calculus & Applications, CS 106B - Data Structures & Algorithms, CS 109 - Probability for Computer Scientists

### Boston Latin School - Boston, MA | 4.41 GPA

June 2024

Relevant Coursework: AP Calculus BC, AP Chemistry, AP Chinese, AP Latin, Physics, Ancient Greek

## Professional Experience

### Research Assistant | Boston Children's Hospital

June 2023 - August 2024

Department of Orthopedic Surgery and Sports Medicine - Boston, MA

- Trained and validated a 3D U-Net CNN ML model to segment bones from MRI & CT scans
- Created 3D knee models of ACL injuries using automatically segmented MRI data
- Increased model success rate from **10% to 85%**
- Performed statistical analysis of pre-operational & post-operational clinical notes

### Peer Tutor | The Calculus Project

July 2021 - August 2022

Boston, MA

- Tutored low-income students in Algebra 1, Algebra 2, Geometry, and Precalculus 25 hours a week
- Led teams of students to two 1st place wins at SuccessLink entrepreneurship hackathons

## Projects

### Founder & CEO | ScholaLatinae 501(c)(3)

April 2023 - Present

- Developed a Next.js website that helps **over 2,900 students** learn Latin & Greek for free
- Edit video lessons and release them on YouTube; Design social media marketing posts using Photoshop
- Programmed an algorithm for recommending practice questions based on past success, over **10k qs answered**

### Founder & Software Engineer | InboxRecap

August 2024 - Present

- Run an inbox management software that sends daily summary emails of one's inbox & helps bulk unsubscribe
- Developed using Next.js, CSS, & Joy UI library, interacts with GPT-4 API, Gmail API, & Resend API

### Developer | Browser Games

July 2024 - Present

- Programmed a soccer penalty shootout game using PyGame
- Created an Atari Breakout inspired browser game using the JsGraphics library

## Skills

**Technical:** Python, C++, & Javascript; Full stack web development (Next.js, React.js, Flask, Tailwind CSS, HTML)

**Language:** Bilingual in English and Amharic; Studied Mandarin Chinese, Latin, Ancient Greek, and Ge'ez

**Design/Computer:** Adobe Photoshop, Premiere Pro; Advanced in Google Suite & Microsoft Suite

## Extracurricular Activities

- Stanford Philharmonia, **Percussion** (2024 - Now)
- Stanford Students in Biodesign & Biopharma, **Digital Health** (2024 - Now)
- Stanford Daily, **Sports & Crossword** (2024 - Now)
- BLS and MA Certamen, **Captain** (2019 - 2024)
  - o Quiz-bowl-style game on Ancient Rome
- BLS Analytics in Sports, **President** (2022 - 2024)

## Honors & Awards

- **11x** National Certamen Winner, **3x MVP**
- 22-23 Community Service Award (**250+ vol. hrs**)
- MA Seal of Biliteracy in **Amharic & Latin**
- 2023 Boston Children's Hospital Internship Commencement Speaker
- National Latin Exam, **Perfect Score** ('19, '21, '24)
- Harvard Certamen, **1st Place & MVP**, (2021)