

# Aarush Kumar

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## EDUCATION

**Bachelor of Science in Computer Science** Expected May 2029  
GPA: 4.0  
Macaulay Honors College at The City College of New York | New York, NY

**High School Diploma with Honors** June 2025  
GPA: 4.0  
Manhattan Center for Science and Mathematics | New York, NY

## EXPERIENCE

**Vernato** June 2025 – Present  
Remote  
*Founder and Developer*

- Built an AI pronunciation platform using Azure Speech SDK to deliver unmatched phoneme-level analysis and assessment across 30+ languages and their regional variants
- Created VoiceGuru chatbot with Google Gemini for personalized coaching and adaptive learning
- Implemented IndexedDB caching + automated cleanup, reducing Vercel transformations by ~90%
- Added TOTP-based multi-factor authentication (MFA) and CSRF protection to secure audio recordings

**Simplify Me.** Dec 2023 – May 2025  
New York, NY  
*Founder and Developer*

- Created a platform to simplify privacy policies using ToS;DR framework + AI-generated summaries
- Built WordPress backend with trending system, Zapier automations, and Discord bot for file processing
- Presented to Artificial Intelligence class at The City College of New York under instructor Sam Kessler

**EMTY Commuting App** Aug 2024 – April 2025  
New York, NY  
*Lead Developer and App Designer*

- Designed UX in Figma to display real-time subway car occupancy; built secure real-time backend with Firebase Auth and Realtime Database
- Presented EMTY at the U.S. Capitol and to Congressman Adriano Espaillat's office

**Veritas AI** Sept 2024 – Nov 2024  
Remote  
*AI Scholar*

- Collaborated with Harvard CS PhD candidate Jason Jabour to train and validate CNNs on CIFAR-10
- Led group to achieve the highest reported test accuracy of 72.24% using a baseline CNN, and tuned activation functions (ReLU, Leaky ReLU) + L2 kernel regularization to improve generalization.

## VOLUNTEERING

**Ranger Conservation Corps** Oct 2024 – Dec 2024  
New York, NY  
*Volunteer*

- Participated in restoration projects in four Manhattan parks, including the removal of invasive species
- Gained hands-on experience with traditional Lenape conservation techniques while contributing to the preservation of New York City's tribal and natural history

## HONORS & AWARDS

- First Place, Congressional App Challenge (NY-13) for EMTY
- AP Scholar with Distinction

## TECHNICAL SKILLS

**Languages** | TypeScript, JavaScript, HTML (Proficient); Python (Intermediate); C++, Swift (Beginner)

**Frameworks & Tools** | Git, Vercel, Firebase, Azure, AWS, Google Cloud, Zapier, WordPress, Next.js, Tailwind CSS