

Aarush Kumar

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EDUCATION

Bachelor of Science in Computer Science Macaulay Honors College at The City College of New York New York, NY	May 2029 GPA: N/A
High School Diploma with Honors Manhattan Center for Science and Mathematics New York, NY	June 2025 GPA: 4.0

EXPERIENCE

Vernato <i>Founder and Developer</i>	June 2025 – Present Remote
<ul style="list-style-type: none">Built an AI pronunciation platform using Azure Speech SDK to deliver unmatched phoneme-level analysis and assessment across 30+ languages and their regional variantsCreated VoiceGuru chatbot with Google Gemini for personalized coaching and adaptive learningImplemented IndexedDB caching + automated cleanup, reducing Vercel transformations by ~90%Added TOTP-based multi-factor authentication (MFA) and CSRF protection to secure audio recordings	
Veritas AI <i>AI Scholar</i>	Sept 2024 – Nov 2024 Remote
<ul style="list-style-type: none">Collaborated with Harvard CS PhD candidate Jason Jabour to train and validate CNNs on CIFAR-10Led 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	
EMTY Commuting App <i>Lead Developer and App Designer</i>	Aug 2024 – April 2025 New York, NY
<ul style="list-style-type: none">Designed UI and UX in Figma to display real-time subway car occupancy; built a secure real-time backend with Firebase Auth and Realtime DatabasePresented EMTY at the U.S. Capitol and at Congressman Adriano Espaillat's office	
Simplify Me. <i>Founder and Developer</i>	Dec 2023 – May 2025 New York, NY
<ul style="list-style-type: none">Created a platform to simplify privacy policies using ToS;DR framework + AI-generated summariesBuilt WordPress backend with a trending system, Zapier automations, and a Discord bot for file processingPresented to the Artificial Intelligence class at the City College of New York under instructor Sam Kessler	

VOLUNTEERING

Ranger Conservation Corps <i>Volunteer</i>	Oct 2024 – Dec 2024 New York, NY
<ul style="list-style-type: none">Participated in restoration projects in four Manhattan parks, including the removal of invasive speciesGained 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
- Second Place, Zahn Center Innovation Sprint (Empire State Realty Trust) for Stuart
- 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