

EDUCATION

Harvard University Cambridge, MA	<i>Expected May 2026</i>
<i>John A. Paulson School of Engineering and Applied Sciences: A.B. in Computer Science, S.M. (Concurrent Masters) in Computer Science</i>	
<ul style="list-style-type: none">• Cumulative GPA: 3.92/4.0 Extracurricular Activities: Harvard Tech for Social Good, Harvard Undergraduate Capital Partners, Harvard Computer Society, Harvard Bhanga.• Relevant Coursework: Systems Programming and Machine Organization, Linear Algebra and Vector Calculus, Linear Algebra and Real Analysis I, Discrete Mathematics.	
South Windsor High School South Windsor, CT	<i>August 2018 - June 2022</i>
<ul style="list-style-type: none">• Valedictorian Cumulative GPA: 4.46/4.0 SAT: 1580/1600 (Math: 800/800, EBRW: 780/800) 2022 Coca-Cola Scholar Harvard Prize Book Award• 2x AIME Qualifier AIME Score: 11 USA Math Olympiad (USAMO) Index: 219.5	

WORK EXPERIENCE

Harvard Programming Languages Group <i>Undergraduate Researcher</i> Cambridge, MA	<i>starting June 2023</i>
<ul style="list-style-type: none">• Conducting research in self-verification for large language models and generative AI under Professor Nada Amin as part of the Program for Research in Science and Engineering.	
Harvard University <i>Computer Science Teaching Assistant</i> Cambridge, MA	<i>January 2023 - present</i>
<ul style="list-style-type: none">• Grading student assignments and holding office hours for <i>COMPSCI E-20 Discrete Mathematics for Computer Science</i> under Dr. Rebecca Nesson.	
North South Foundation <i>Software Engineering Intern</i> Chicago, IL (Remote)	<i>January 2022 - June 2022</i>
<ul style="list-style-type: none">• Developed online donations platform using React and Node.js, and implemented transaction processing using Stripe and Braintree APIs.• Built an authentication system for verified donors to access the payment portal easily and securely. Created a scheduling algorithm to allow donors to schedule donations.	

EXTRACURRICULAR & LEADERSHIP EXPERIENCE

Harvard Programming Languages Group <i>Undergraduate Researcher</i>	<i>February 2023 - present</i>
<ul style="list-style-type: none">• Exploring the incorporation of formal verification into large language models under Professor Nada Amin.	
Harvard Tech for Social Good <i>Senior Software Engineer</i>	<i>September 2022 - present</i>
<ul style="list-style-type: none">• Co-developed a web app for OkaySo (React & Node.js, 10,000+ lines of code). OkaySo enables users to ask questions regarding identity, relationships, and more.• Implemented secure expert authentication and developed core, cache-optimized expert live chat feature for fast messaging.	
Harvard Undergraduate Capital Partners <i>Sourcing Analyst</i>	<i>September 2022 - present</i>
<ul style="list-style-type: none">• Sourcing early-stage startups and connecting them with prominent venture capital firms.	
CodeSavant <i>Founder, Author, and Programming Instructor</i>	<i>April 2020 - present</i>
<ul style="list-style-type: none">• Developed a computer science curriculum and taught beginner and intermediate Python programming classes nationwide, raising ~\$2,000 for COVID-related causes.• Published Python and Java programming books on Amazon and created CodeSavant YouTube Channel (~1400 subs/300k+ views).	
MetricMix, LLC <i>Founder and Mobile App Developer</i>	<i>September 2018 - present</i>
<ul style="list-style-type: none">• (Using Swift for iOS App Development) Developed GeoScholar, a geography quiz app; Scholarly, an advanced GPA calculator; Gene Xpress, a protein synthesis simulator; GSEF Official, an economics resource app; and ReadSpeak, an accent translation app.	

PROJECTS AND CERTIFICATIONS

Table Tennis CV Computer Vision-Machine Learning Application	<i>August 2021</i>
<ul style="list-style-type: none">• Built a computer vision-machine learning application to track active table tennis gameplay using Python and OpenCV.• Leveraged frame differentiation and elliptical Hough transform to track a moving ball in view.• Trained a machine learning model using the Scikit-Learn library in Python to predict where a ball lands based on the initial return location.	
Pillola Automated Pill Dispenser Prototype	<i>July 2021</i>
<ul style="list-style-type: none">• Designed all dispenser parts and conducted structural analyses using Autodesk Fusion 360, meant for use in senior living facilities.• Used Arduino and C++ to automate pill dispensing, scheduling, and secure fingerprint/keypad authentication.	
FIRST Robotics Team Captain and Lead Programmer	<i>September 2018 - June 2022</i>
<ul style="list-style-type: none">• Implemented Limelight vision pipeline to integrate real-time object-tracking.• Developed path trajectories using Hermite clamped cubic splines with PID feedback control for autonomous path-following.	
Java Decaffeinated Published Book View on Amazon	<i>October 2021</i>
<ul style="list-style-type: none">• Published an introductory Java programming book covering types, control structures, and object-oriented programming concepts.	
The Python Starterpack Published Book View on Amazon	<i>April 2020</i>
<ul style="list-style-type: none">• Published an introductory Python programming book covering types, control structures, and object-oriented programming concepts.	
Shortest Paths Revisited and NP-Complete Problems Stanford Online Certificate	<i>January 2021</i>
Graph Search, Shortest Paths, and Data Structures Stanford Online Certificate	<i>December 2020</i>
Greedy Algorithms, Minimum Spanning Trees, and Dynamic Programming Stanford Online Certificate	<i>December 2020</i>
Divide and Conquer, Sorting and Searching, and Randomized Algorithms Stanford Online Certificate	<i>November 2020</i>

SKILLS AND INTERESTS

Languages: English (fluent) Tamil (native) French (business proficiency)	
Programming Languages and Frameworks: Python, C++, Java, JavaScript, React, Node.js, Swift, Dart	
Computer/Software: Alexa Developer Console, Autodesk Inventor, C++, Canva, Figma, Firebase, Flutter, Git, GitHub, Homebrew, HTML/CSS, LaTeX, Markdown, Matplotlib, Microsoft Office Suite, Notion, NumPy, Onshape, OpenCV, PyCharm, SoftCover, Visual Studio Code	
Interests: Tennis Piano Chess Indian folk dance	