

EDUCATION

Georgia Institute of Technology • GPA: 4.0 / 4.0

Expected Graduation: **May 2026**

Bachelor of Science, Computer Science

Atlanta, GA

Bachelor of Science, Mathematics

- Relevant coursework: Data Structures (Java), Graduate Algorithms, Computer Organization and Programming, Dynamics and Bifurcations, Introduction to Perception and Robotics
- Clubs and organizations: GT Web Dev Club, GT Video Game Development Club, GT Competitive Math

Ohlone College

June 2023

Dual Enrollment

Fremont, CA

- Relevant coursework: Java Programming, Intro to Cybersecurity, Multivariable Calculus, Differential Equations

PROJECTS AND EXPERIENCE

Research with GT Computational Neuroscience group

January 2024 - present

Research Assistant

Skills: PyTorch, computer vision

- Conduct research regarding the optimization of biologically inspired perception-action machine learning models for active vision
- Run experiments to determine ideal parameters for vision models in order to optimize accuracy, learning rate, and computational feasibility

GT/IBM Virtual Summer Internship Program

May 2024 - August 2024

Developer

Skills: PyTorch, Python, C++

- Worked with mentors from IBM to learn about and contribute to various projects under the PyTorch Foundation, including the main PyTorch repo and PyTorch tutorials
- Debugged erroneous code relating to the Torch just-in-time compiler and TorchDynamo

Dungeon Deja Vu •  dsfhdsjdjtsb/dungeon-deja-vu

August 2024

Gameplay and Audio Programmer

Skills: Rust, Bevy, Game Development

- Developed a full-fledged platformer game with 6 levels and ~1 hour play time for Bevy Game Jam #5
- Placed 8th overall out of 77 entries, winning 3rd place in the Game Design category

Coda •  ambareesh1510/coda

April 2023 - December 2023

Developer

Skills: Rust, Low-level Audio APIs

- Used cross-platform audio libraries to develop a parser and interpreter for a music synthesis programming language designed around low-level frequency manipulation
- Implement custom audio rendering logic to produce a variety of different sounds

Research on Chaotic Hash Functions •  ambareesh1510/chaotic-hash-functions

November 2023

Independent Researcher

Skills: C, Python/Jupyter Notebook, data analysis

- Completed a research project regarding the effectiveness of cryptographic hash functions designed using simple discrete chaotic maps as a part of MATH 4541 (Dynamics and Bifurcations I) at Georgia Tech
- Programmed and benchmarked various hash algorithms in C, then analyzed the results using NumPy and Matplotlib

FIRST Tech Challenge

September 2017 - March 2022

Programming Lead

Skills: Java, Python, TensorFlow

- Worked with other high school students to design, build, and program a robot capable of completing various challenges using a Java API, winning multiple awards for robot design and outreach

AWARDS	Four-time AIME qualifier; high score of 7					National Merit Scholar			Eagle Scout	
TECHNICAL SKILLS	Rust	C/C++	Python	PyTorch	Java	React	PostgreSQL	LaTeX	Git	Linux (Arch)
LANGUAGES	English (native)		Tamil (native)		Mandarin Chinese (proficient)				Sanskrit (proficient)	