

Aarush Thadani



4253624398

aarush.thadani@outlook.com

SUMMARY

Aspiring Computer Scientist, with years of programming experience utilizing Java, Kotlin, Python, C#, C++, HTML, CSS, JavaScript complemented by a strong foundation in computer science and mathematics. Successfully achieved distinction in the American Math Competition 10 and qualified for the AIME, demonstrating analytical skills and problem-solving capabilities. Co-led math competitions for elementary schools, showcasing organizational and leadership abilities. Varsity Captain of Cross Country Team.

EDUCATION

High School Diploma

Eastlake High School • Sammamish, WA • 2026 • 4.00

- Currently enrolled in AP Calculus BC, AP Statistics, AP Physics 2, AP Physics C: Electricity & Magnetism, AP English Literature, University of Washington Astronomy, and University of Washington Psychology
- Completed AP Computer Science A (exam:5), AP Physics 1 (exam:5) and AP World History (exam:5), AP Chemistry(exam:5), AP Calculus AB(exam:5), AP Physics C: Mechanics(exam:5), AP Microeconomics(exam:5), AP Macroeconomics(exam:5) and AP US History(exam:5)

EXPERIENCE

TSA Member

Technology Student Association (TSA)

September 2024 - Present

- Collaborated in a group setting on multiple projects such as designing and flying a drone, building a dynamic website and writing an original music score for a video game
- Designed and constructed fully functional Drone, to be able to navigate through obstacles and pick up payloads.
- Qualified for State Level competition in Drone(UAV) Event

Math Tutor

Mathnasium

January 2024 –January 2025

- Taught math to kids from grade 1 to 8 with topics ranging from simple addition to Algebra and Geometry
- Tailored instruction to individual students in a 4:1 group setting
- Helped students improve math grades from 75% to 90%+
- Responsible for reviewing all student skill assessments and ensuring that all students score 100% before moving forward

NHS Member

National Honor Society (NHS)

September 2023 - Present

- Initiated as a member for maintaining a GPA of 3.75 or higher in grades 9 through 11
- Contributed to the conservation of local parks to remove invasive species and plant native trees
- Dedication of 50+ hours to community service and volunteer work

MHS Member

Math Honors Society (MHS)

September 2022 - Present

- Achieved distinction in the American Math Competition (AMC 10)
- Qualified for the American Invitational Math Examination (AIME)
- Organized and co-spearheaded math competitions for local elementary schools

Varsity Athlete & Captain

Eastlake Cross Country and Track & Field

September 2022 - Present

- Dedicated 25+ hours weekly on practices, meets, strength training, etc.
- Organized and Led Practices and Team Events
- Earned Varsity status by being among the top 14 runners on the team
- Achieved an 18:16 5k time, and a 5:03 mile personal record time to date
- Qualified for Nike Cross Regional (NXR) and competed against 3500+ runners from 7 different states

PROJECTS

Inventory Management App

github.com/aarusht/InventoryManager and github.com/aarusht/InventoryManagerBackend February 2024 - Present

- Built on three tier cloud-based Inventory Management System with a caching system as an Android App for Eastlake Robotics Team
- Developed Android App using Model-View-ViewModel Architecture (MVVM) with Google Account Login in Kotlin
- Built Server-side containerized architecture in java using Spring framework, SQL database and Docker
- Designed to allow Website and iOS app to work on same architecture in future

Rubiks Cube App

https://www.youtube.com/watch?v=N0PnNd_oSWc and <https://github.com/aarusht/RubiksCube3D> • June 2023 – October 2024

- Used the Unity Game Engine with C Sharp to develop a 3D Rubiks Cube application for Android
- Developed an algorithm to solve the Rubiks Cube
- Created a guided tutorial to teach a user how to solve a Rubiks Cube

Ray Tracer

github.com/aarusht/RayTracer • June 2021 - July 2022

- Developed a simple modular ray tracer in Java to render spheres in 3D space
- Implemented complex lighting techniques including Ambient and Diffused Lighting, Reflections, and Shadows

Inventory Management Website

github.com/aarusht/LeopardSealRebooted • November 2023 – January 2024

- Used the html, css, javascript to build frontend website for inventory management system
- Developed locally hosted backend system using python, flask server and sqlite3 database

Minesweeper

github.com/aarusht/Minesweeper • September 2022 - October 2022

- Used Java to create a playable Minesweeper game
- Created a modular system to allow games of different sizes and difficulties

Sudoku

github.com/aarusht/Sudoku • June 2022 - June 2022

- Used Java to create a playable Sudoku game
- Developed multiple algorithms to be able to solve any Sudoku puzzle

CERTIFICATIONS

Trinity College of London Grade 5 Piano

2023

- Demonstrated ability to play complex piano pieces
- Showed technical piano skill with exercises, scales and arpeggios
- Received mark of Distinction for high performance on 3 pieces

Harvard CS50

2024

- Completed rigorous, college-level coursework covering C, Python, SQL, HTML, CSS, JavaScript, and Flask
- Built multiple full-stack projects applying data structures, algorithms, and web programming
- Earned official certificate for high performance and full completion

AWARDS

Qualified for AIME

November 2023

- Qualified for the American Invitational Math Examination (AIME) for achieving a score higher than 105 in the American Math Competition 10 (AMC 10)

Distinction in AMC 10

October 2023

- Awarded Distinction for scoring above 105 in the American Math Competition 10 (AMC 10)

SKILLS

Programming: Java, Kotlin, Unity Game Engine (C#), python, HTML, CSS, JavaScript, TouchDesigner (C++), SQL

Frameworks: Docker, Vite, Three.js, GSAP

Foreign Languages: Hindi, French
Music: Piano, Guitar, electronic music production
(https://www.youtube.com/@spAAce_mAAAn)