Visshwa Balasubramanian

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EDUCATION		
08/21 – 05/25	**Westwood High School**	Austin, Texas
	Weighted GPA: 5.1 Graduating with Distinguished Level of Achievement Plan and Endorsements in STEM SAT: 1410 (M: 760 R: 650) AP Exams: AP Human Geography: 4, AP Macroeconomics: 4, IB Spanish 4 SL: 5, IB Psychology SL: 5	
	Clevered *Student* ● Received the AI/ML Certification ● Mastered Prompt Engineering, Neural Networks, Fine-Tuning, and Large Language Models ● Created Movie Recommendation projects, Music Recommendation programs, Chatbots, and Social Media Sentiment Analyzer that utilized Python Pandas	
	Coursera ● *Fine Tuning LLMs* by Andew Ng, Open AI ● *Prompt Engineering* by Andrew Ng, Open AI	
RESEARCH/ INTERNSHIP/ INDEPENDENT PROJECTS		
10th	**Tech Jedi** *Programming Intern & Shareholder* ● Designed curriculums about Tech and Programming Languages i.e. (Java, C++, C#) courses for education startup, receiving 500+ purchases ● Used Python to send requests to Open AI's GPT 3.5 model and receive high quality responses programmatically with automation using iterative sequences. ● Published independent course about Chess with assistance from Tech Jedi team	5 Hrs/Week 9 Weeks/Yr

10th-11th	**CodeNinjas** *Paid Intern, Sensei* ● Hosted Minecraft-modding camp for 10+ students ● Taught students how to use M-Creator to customize their own Minecraft worlds ● Organized Scratch Junior camp for 15+ students ● Educated students on block coding and the utilization of animation to create interactive environments	2 Hrs/Week 9 Weeks/Yr
10th	**Inspirit AI Internship** *Intern* ● Utilized advanced Python and Google Colab data manipulation techniques and completed a Facial Emotional Detection software ● Programmed a model that detects user emotions using facial images and could output emotions appropriately without labels ● Attended daily lectures to gain familiarity with Google Colab and the Python syntax libraries needed for project completion	8 Hrs/Week 2 Weeks/Yr
12th	**VideoAssistant.AI** Backend Developer ● Utilized expertise in AWS (Amazon Web Services) and CDK (Cloud Development Kit) to help the team manage all their resources programmatically. ● Built an infrastructure consisting of numerous AWS resources, such as Lambda, S3, SQS, DynamoDB, and API Gateway. ● Worked with a team of around twenty people on this SAAS product (Software As A Service) ● Code reviewed for the team using GitHub (Version control tool) and also suggested edits to make programs more efficient. ● Used LLMs to generate the content for base videos that users could choose from in the platform.	5 Hrs/Week 8 Weeks/Yr
12th	**PiPartner App** Creator ● Created an AI-based tutor app for students that are struggling or need help with certain math concepts.	5 hrs/Week 10 Weeks/Yr

	● Used OpenAI's API and model 4o for this task to ensure the best results possible. ● Introduced a new framework for improving student performance through additional resources tailored to the specific topic at hand. ● Utilized Flutter to build the UI and Dart programming language to code the user functionalities and general layout of the app. ● Utilized Amazon AWS Lambda and API Gateway for the backend functionalities of the app, i.e letting the user input a problem and outputting their chat history with the tutor.	
12th	**UTD DSA Summer Program** Student ● Applied and was accepted into UTD's prestigious DSA Summer program. ● Learned all the complex and fundamental Data Structure's that are integral to Java and Computer Science. ● Improved Java programming skills through various projects as part of the program and learned decision-making with Data Structure's	3 Hrs/Week 8 Weeks/Yr
112h	**Algoverse AI Research Program** Researcher ● Applied and was accepted into the Algoverse LLM Research program. ● Conducted research on the rational consistency & calibration of Large Language models to assess the viability to integrate into classroom settings. ● Utilized advanced training methods with Python and Google Colab to train LLMs on large datasets. ● Wrote and published a research paper that was submitted to conferences.	4 Hrs/Week 15 Weeks/Yr
ACTIVITIES		
11th-12th	**Westwood High School Artificial Intelligence Club** *Member* ● Participated in competitions about neural network accuracy within the club. ● Presented research paper on LLMs to club members and officers ● Learned about autonomous vehicles and the software behind their systems.	2 Hrs/Week 30 Weeks/Yr

9th-12th	**Westwood High School DECA**	4 Hrs/Week
	Web Developer (12th)	36 Week/Yr
	● Created website for school chapter	
	● Utilized HTML programming skills to customize website and add new designs	
	● Added log-in system with AWS Cognito integration to allow users to have "member-status" feature.	
	Competitor (9th-11th)	
	● Managed mock sports businesses while competing in Sports and Entertainment Team Decision Making and made decisions regarding marketing plan operations, advertising, public relations, and target market.	
	● Created a marketing plan for common services as part of Business Services Marketing event.	
	● Managed all marketing functions in order to create a comprehensive plan to increase sales rather than just in the service sector as in "BSM" as part of Marketing Team Decision Making.	
10th-11th	**Westwood High School Chess Club**	2 Hrs/Week
	Member	36 Weeks/Yr
	● Competed in 36 in-person tournaments	
	● Achieved 1300 United States Chess Federation rating as of 2023 and 1700 Chess.com rating as of 2021	
	● Studied grandmaster games to discover variations and lines to apply in tournament play	
9th	**ATA Martial Arts**	
	Member	
	● Completed Purple Belt test in Taekwondo	
	● Attended sparring competitions; showcased talents by breaking boards and demonstrating discipline	
	● Assisted with setup and cleanup of events	
11th-12th	**Westwood High School Spanish Honor Society (Sociedad Honoraria Hispanica)**	4 Hrs/Week
	Member	36 Weeks/Yr
	● Selected through an application process requiring an average of 88 or above and 2 teacher recommendations	
	● Practiced spoken Spanish skills at meetings	
	● Presented meeting slideshows regarding meeting agenda	
	● Assisted in PASF conference travel and budgeting logistics	

11th-12th	**Westwood High School National Honor Society Member** ● Donated clothes to the homeless through clothing drive ● Created Valentine's Day cards for teachers to show student appreciation ● Participated in a canned food drive for Austin area homeless shelters	6 Hrs/Week 36 Weeks/Yr
VOLUNTEERING		
11th-Finished	**Code Club** *Founder, Lead AI Teacher, and Communications Manager* ● Crafted a curriculum for the first batch of students teaching AI topics such as Machine Learning, Neural Networks, and Data Science. ● Maintained club communications via emails, newsletters, and polls for upcoming meetings ● Tailored lesson plans to coordinate with Google Colab platform to better teach Data Science and AI alongside basic Python	2 Hrs/Week 36 Weeks/Yr
10th - 11th	**Parinama** *Lead Instructor and Center Supervisor* ● Taught 1st-8th graders in Chess, Math, English, History, and Science and was responsible of keeping track of their progress through assessments ● Utilized class textbooks and exercises to teach new opening, endgame, and middlegame strategies to students; leveraged prior chess-playing knowledge to advance student critical thinking skills ● Cleaned center to attract new enrollments and maintain functionality of materials and technology	4 Hrs/Week 36 Weeks/Yr
9th - 10th	**Austin Tamil School** *Assistant Teacher* ● Assisted lead teacher in classroom management of 12+ students ● Posted and graded assignments on Google Classroom ● Improved spoken Tamil skills while substituting for lead teacher	4 Hr/Week 36 Weeks/Yr
11th	**First Lego League Robotics** *Coach*	5 Hrs/Week 8 Weeks/Yr

	● Utilized coding skills to assist 5 students with innovation project requiring robot navigation of obstacles on a set course. ● Guided the team to 1st place Regional and 3rd place State finishes ● Created presentations about the thought process, feasibility, and cost analysis for innovation project	
11th	**Sierra Club** *Booth Manager - Lakeline Mall Farmers Market* ● Represented the Austin chapter of the Sierra Club at weekly farmers market ● Advocated for combating global warming and reducing carbon emissions ● Generated 50+ signatures for Sierra Club informational email list about meetings and community service efforts	2 Hrs/Week 3 Weeks/Yr
HONORS & AWARDS		
10th	**Presidential Volunteer Service Award - Bronze** ● Completed 100+ hours of community service at Parinama Academy	
10th	**National Spanish Exam – Silver Medal** ● Scored in top 95% of test takers out of 3000 test takers	
11th	**DECA Virtual Business Challenge: Entrepreneurship** ● Placed 23rd nationally and 8th in Texas region South ● Simulated a fast-food restaurant and bowling business to achieve highest profit within competition window ● Managed business finances and operations such as market research, acquiring resources, setting prices, monitoring backlog, and etc.	
9th	**DECA State Finalist** ● Placed in the top 10 in Sports Entertainment Team Decision Making event ● Averaging score of 85 on the Marketing Cluster Exam (84 & 86)	
10th	**DECA State Qualifier** ● Qualified for State Conference in Business Service Marketing event out of 10+ schools in District 5 ● Received a score of 81 on the District Exam and Marketing Cluster Exam	

	● Researched market trends, creative marketing strategies for services, and best practices for promoting services and selecting optimal target markets	
11th	**North South Foundation State Level Computer Science Bee** ● Placed 2nd out of 20 competitors ● Demonstrated skills in Python and Javascript ● Received a score of 25/30 multiple choice questions about code tracing	
11th	**CodeHS Level 1 Cybersecurity Certification** ● Completed Cybersecurity Level 1 Certification Exam with score of 45/50 (90%) ● Passed alongside only 4 other people in the whole school enrolled in a cybersecurity class (approximately 100)	
SKILLS, TALENTS & ACHIEVEMENTS		
	Languages *Hindi* ● Professional Working Proficiency ● Extracted and interpreted advance uses of the language in North Indian movies. ● Conversed in solely Hindi during visits to Delhi and Pune in North India ● Helped translate sentences and phrases to my parents when communicating with local vendors. *Tamil* ● Primary Fluency / bilingual proficiency ● Talked with my grandparents in Tamil only on the phone. ● Assisted them with translation during their visits to the US relaying them the information in Tamil from English *Spanish* ● Professional Working Proficiency ● Communicated with waiters at Mexican restaurants in Spanish while ordering food (I'm sorry I couldn't think of anything else 😭)	
	Programming	

	- Fluent in Python: created mini-projects regarding Data Science, Silver on Hackerank, Created AI Assistant for high school students - Master in Java: Silver on Hackerrank, Certified in ITS and Hackerrank - Working proficiency in HTML: Created personal website, and DECA website - Beginner in Javascript: Worked on application for PiPartner Project (AI Assistant) - Proficient in Dart (AI Assistant) - Expert in AWS (Amazon Web Services): i.e Cognito, Lambda, API Gateway, SQS, S3, and more.	
9th-Current	**Drawing** - Worked on Portraits of famous celebrities, such as Trump, Albert Einstein, and etc; used sketching techniques. - Completed Acrylic Paintings of Buddha, and other landscapes - Dabbled in watercolor painting learning proper brush techniques	
9th-10th	**Carnatic Music** - Studied for 6 years consistently - Participated in religious gatherings and sang devotional songs using Carnatic music skills	
9th-10th	**Piano** - Took lessons for 1 year and performed at 2 recitals - Performed in front of other piano students and parents that were part of the class	
9th	**Dance** - Learned Tamil folk dance for 3 years - Performed at 5 religious events associated with Austin Tamil Sangam - Received awards for the best performance 2 out of the 5 years - Performed at San Antonio with a group for a huge cultural event	