

Ashmita Appineni
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EDUCATION

- Evergreen Valley High School, San Jose, CA – Graduating Class 2025
- Cumulative GPA: 4.22 (weighted)

HONORS / AWARD

- USACO Silver Winner / USACO Gold Contestant - 2024
- JSHS Regional Finalist: 2nd place in Engineering & Technology Category - 2024
- JSHS Oral Presentation Competition Finalist: 10th place in Engineering & Technology Category - 2024
- Presidential Volunteer Service Gold Award Winner - 2024
- Research paper approved and accepted for publication in Springer Publication - 2024
- Research paper approved and accepted for Oral Presentation at the 4th International Conference of Information Technology (InCITe 2024) - 2024
- Research paper approved and published with a DOI on Preprints platform. - 2024

ACTIVITIES

Summer Research Assistantship: AI Career Interest Chatbot | San Jose State University, San Jose, CA Jun 2024 - Present

- Created an AI chatbot to help users identify career paths using NLP and machine learning.
- Designed an intuitive UI and conversational flow for enhanced user engagement.
- Improved chatbot accuracy through user testing and feedback integration.

Summer Internship: DevRev.ai, NorthCal Region | Palo Alto, CA Jun 2024 - Present

- Developed and optimized LLM models to enhance developer-to-customer communication at a high-growth startup.
- Enhanced data quality by testing and creating datasets to improve LLM performance.
- Built custom agents on DevRev.ai's core product, gaining experience in real-world application of LLMs.

Independent Research: Preemptive Diagnosis of Parkinson's Disease through DaT Scans using InceptionV3-based Convolutional Neural Networks | San Jose, CA Mar 2023 - Jan 2024

- As lead author, was approved to publish my research that used fine-tuned Inception V3 model for early Parkinson's Disease detection in Springer Publications.
- Shared findings through publication on Preprints platform, accessible to researchers globally (DOI: 171).
<https://www.preprints.org/manuscript/202312.2268/v1>
- My research earned a competitive spot for oral presentation at the prestigious 4th International Conference of Information Technology (InCITe 2024) under the theme "Adaptive Intelligence: Evolve Your World."
<https://www.amity.edu/incite2024/index.html>

Synopsis Science Fair Project: Detecting Parkinson's disease leveraging Inception-V3 Convolutional Neural Networks for DaT Scan Analysis | San Jose, CA Mar 2024

- Developed a novel, neural-learning-based approach for the early detection of Parkinson's Disease (PD) using DaT SPECT imaging.
- Designed and implemented a Convolutional Neural Network (CNN) model leveraging the Inception V3 architecture.
- Enhanced the model through custom layers, fine-tuning it specifically for DaT SPECT image analysis.

- Achieved a significant accuracy improvement of 23.24% in PD diagnosis compared to a standard Sequential Model (74.65% vs. 51.41%).
- Poised for further development and potential implementation for automated PD diagnosis.

SJ Tutors, Founder | San Jose, CA

September 2022 - Present

- Founded and lead sjtutors.org, for providing free interactive programming sessions for middle and high school students.
- Tutored over 50 students in Java Beginner, Intermediate, and USACO Bronze topics.
- Aimed to equip every interested child with free programming skills and introduce them to competitive programming at an early age.
- Experienced in delivering engaging Java programming sessions tailored to various skill levels.

San Jose Public Library, Volunteer| San Jose, CA

November 2021 – Present

- Learned effective coding instruction techniques at a library workshop, enhancing curriculum development for youth coding sessions.
- Contributed weekly book reviews to the Teens Reach online section, promoting coding education and inspiring young readers.
- Developed engaging lesson plans for self-designed middle and high school coding workshops, fostering student interest in Java programming.
- Led engaging hour-long Java coding workshops for kids, sparking their passion for software development and computational thinking.

Design the Future | San Jose, CA

June 2022 – June 2022

- Developed an accessibility app using Adalo to assist individuals with disability.
- Utilized a user-centered design process, leading the user research phase within a collaborative team of 5.
- The app garnered positive feedback at the Design Expo, with over 100 attendees acknowledging its user-friendly design and potential impact on the visually impaired community.

Blue Stamp Engineering, Participant| San Jose, CA

June 2022 - July 2022

- Demonstrated problem-solving skills by collaborating with instructors to troubleshoot hardware issues like malfunctioning Arduino boards and damaged PN532 modules.
- *Mastered diverse tools including Dremel, saws, soldering irons, and drills while implementing Arduino projects.*
- Created a comprehensive website documenting project milestones, challenges encountered, and key achievements, showcasing communication and organizational skills.
- Presented the project effectively to family and peers, honing communication and audience engagement skills.

LINKS TO PROJECTS

- **Pre-Prints link to Research paper:** <https://www.preprints.org/manuscript/202312.2268/v1>
- **Project at Design the future:** [Foodle app](#)
- **Project at Blue Stamp Engineering:** [Digital Key Lockbox](#)

SKILLS

- **Programming Languages:** Python, Java, C++, Scratch, Swift, HTML, Java Script, SQL
- **Software:** Adalo, Arduino
- **Hardware:** RFID reader, Arduino, Soft Servo, Neopixels, HM-10 bluetooth
- **Languages:** English, Telugu, Spanish (Intermediate)