Aanya Kamath

Aanya Kamath
aanya.kamath@gmail.com
https://aanyakamath.github.io

Education

Evergreen Valley High School / High School Degree

August 2022 - PRESENT, Expected Graduation- June 2026

Current Coursework: AP Calculus AB, AP Computer Science Principles, AP Environmental Science

Completed Coursework: Biology 1, PreCalculus, AP Physics 1 (AP Exam Score: 5)

Other Coursework (Coursera): AI for Everyone, Introduction to Machine Learning, Introduction to Generative AI

SAT (November 2024): 1540

Skills

Basic Python, Jupyter, Biopython, STAR, IGV.

Projects

"A Survey of Genetic Risk Factors for Alzheimer's Disease",

November 2023, A Survey of Genetic Risk Factors for Alzheimer's Disease. Journal of Student Research, 12(4).

https://www.jsr.org/hs/index.php/path/article/view/5246

This paper surveys the different genetic variants that affect risk for Alzheimer's Disease, discusses the prevalence of each risk factor, and their effect on Alzheimer's Disease pathology.

"Potential AD Pathogenic Protein Domains in PSEN1 Isoforms"

This research work identified a potentially pathogenic protein domain encoded in several mRNA transcripts of the PSEN1 gene that could increase risk for Alzheimer's Disease. I used biopython, STAR, and IGV for this research.

Submitted for publication to the National High School Journal of Science

https://github.com/aanyakamath/alz_risk_analysis

"PSEN1 and PSEN2 Isoform Protein Structure Database"

This project will create a database of PSEN1 and PSEN2 isoform structures and provide tools to analyze differences in isoform structure.

https://github.com/aanyakamath/psen_database

Experience

EVHS Youth Movement Against Alzheimer's Disease (YMAA) /
Upperclassmen Representative
January 2025 - PRESENT, SAN JOSE

Organizes events and creates social media posts to spread awareness
and fundraise for the cause of Alzheimer's Disease.

Village Square Branch Library / AP Physics 1 Tutor
November 2024 - PRESENT, SAN JOSE

Tutors 10-11th graders currently enrolled in AP Physics 1.

**2024 Alzheimer's Association Walk to End Alzheimer's
Community Engagement Committee** / Committee Member
March 2024 - PRESENT, SAN JOSE

Promotes community engagement for Walk to End Alzheimer's Events to
raise money for Alzheimer's Disease care, support, and research.

Evergreen Branch Library / Teens Reach Officer
January 2024 - PRESENT, SAN JOSE

Representative of the Teens Reach Volunteers at Evergreen Branch
Library in San Jose. Planning and organizing activities at the library.

Village Square Branch Library / Spanish Teacher
October 2024 - December 2024, SAN JOSE

Taught elementary school students introductory spanish.

Joyce Ellington Branch Library / Physics Teacher
July 2024 -August 2024 SAN JOSE

Taught elementary school students introductory physics.

References

By Request, please email me at aanya.kamath@gmail.com