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

Relevant Coursework: Biology 1, Pre-Calculus (in progress), AP Physics (in progress)

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

Skills

Basic Python, Jupyter, Biopython, BioBlast.

Projects

"A Survey of Genetic Risk Factors for Alzheimer's Disease", July 2023, Accepted for publication in Journal of Student Research (High School Edition),
https://github.com/aanyakamath.github.io/papers/alz_survey.pdf

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.

"Study of Subproteins in Alzheimer's Disease Pathogenic Variants of PSEN1 and PSEN2"

This research work studies the less-known variants of the PSEN1 and PSEN2 genes that increase risk for Alzheimer's Disease. This study will identify sub proteins coded in variants of these genes that could increase Alzheimer's risk. I am running similarity comparisons on nucleotide sequence data of variants of the PSEN1 and PSEN2 genes that increase and decrease risk. Regions of similarity in variants that increase risk that are not present in variants that decrease risk, could code for sub proteins that increase risk for Alzheimer's Disease. I am using python, jupyter and biopython for this work.

https://github.com/aanyakamath/alz_risk_analysis

Experience

Evergreen Branch Library / Teens Reach Officer

January 2024 - PRESENT, SAN JOSE

Representative of the Teens Reach Volunteers at Evergreen Branch Library in San Jose. Plans/Organizes activities at the library.

Evergreen Valley High School Youth Movement Against Alzheimer's / Club Member

November 2023 - PRESENT, SAN JOSE

Organizes fundraising events and educates the public on Alzheimer's Disease.

References

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