

ASMAT KAUR TAUNQUE

EDUCATION

California Institute of Technology, Pasadena, CA
Bachelor of Science, Computer Science, Class of 2025
GPA: 4.2

PROFESSIONAL EXPERIENCE

COMPLEX PHYSICS ENGINE + GAME PROTOTYPING 05/2023 to 06/2023

Caltech, Pasadena, CA

- Built a game with a complex physics engine and key handling in C programming language within 4 weeks.
- Built working demos for Pac-Man, Space Invaders, Breakout, Stars, Spring simulation games.
- Devised customized data structures
- Developed game-related tools and scripts, like key-handling and data structure abstractions, to facilitate game development.
- Created the level design, gravity implementations in the physics engine, rendered background music + sound effects, and animations.

WEB DEVELOPER 04/2023 to 06/2023

Caltech, Pasadena, CA

- Developed creative webpages, including a personal portfolio (GitHub link in header) using HTML5, CSS, JavaScript frameworks.
- Developed an e-commerce website for accessible, anxiety-relief plushies. Used HTML5, CSS, and JavaScript frameworks to deliver a user-friendly platform aimed at promoting comfort and mental health support.

STUDENT RESEARCHER 06/2022 to 08/2022

University of Utah, Salt Lake City, UT

- Achieved optimization of the chlorination of cerium oxide to reuse nuclear waste as nuclear fuel in 8 weeks.
- Co-authored a paper on the time-dependent chlorination of cerium oxide in Springer Journals (link here: <https://link.springer.com/article/10.1007/s10967-023-08879-4>).
- Aided in nuclear research to enhance efficiency and sustainability of nuclear reactors. • Interpreted and analyzed research data to draw conclusions on outcomes.

SKILLS

- Technical Skills: C , Python , Java , JavaScript , HTML5 , CSS
- Software Skills: Visual Studio Code , Google Colaboratory, JupyterLab , IntelliJ , GitHub
- Code reviews , Code Testing and Readability , Debugging
- Competencies: Written and verbal communication , Problem Solving , Critical Thinking , Teamwork

EXTRA-CURRICULARS

- International level basketball player, captain of State teams in India
- Vice President of theatre club at Caltech (ExPLiCIT)
- Budding singer and guitar player