Mishka Mansukhani

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EDUCATION

California State University of Long Beach

Bachelor of Science, Computer Science • GPA: 3.6

Long Beach, CA

Expected Graduation: 2027

- Awards: President's Honor List (2023 2024), Dean's List (2024 Present)
- Activities: Women in Computing (Design Committee, 2025 Present)
- Relevant Coursework: Data Structures & Algorithms, Object Oriented Programming, Computer Architecture

TECHNICAL SKILLS

- Programming & Tools: Python, JavaScript, Git, PyCharm, OpenProcessing, WebVPython Glowscript, TouchDesigner, NomadSculpt, Canva, Adobe Lightroom
- Skills: Game Development, UI/UX Design, AI & Computer Vision, Digital Media & Art
- Languages: English (Native), Tagalog (Native)

PROJECTS

Open Processing Racing Game with Local Multiplayer

- Developed a 2D local multiplayer racing game with procedurally generated terrain, traffic, and weather systems.
- Implemented real-time physics, collision detection, and friction-based movement using p5.js for interactive gameplay.
- Designed immersive UI screens (start, race, winner) with animated scenery and dynamic camera tracking.

Video Game Physics Modeling with WebVPython

- Programmed 3D Newtonian motion models: projectile trajectories, elastic collisions, mass-spring-damper systems etc.
- Applied momentum-based and kinematic approaches to simulate physics phenomena with accuracy.
- Constructed real-time velocity, distance, and force graphs in VPython for data visualization to strengthen computational modeling skills.

AI Based Hand-Tracking UI/UX Design for Audio-Visual Control

- Engineered a real-time hand gesture recognition system to control audio-visual media with <200ms response time using MediaPipe
- Configured and implemented custom gesture-to-action mapping (playback, volume, brightness) using Python + OpenCV.
- Conducted usability testing, improving efficiency by 25% for common media operations compared to traditional keyboard-based input.

Card Betting Game with Randomization

- Developed a console-based card game in Python, simulating Three Card Monte with randomization and betting logic.
- Utilized modular programming principles with reusable Python functions for user input handling, card placement, betting, and results.
- Integrated custom, robust input validation and error handling by assembling a custom check_input module, ensuring reliable gameplay flow and clear program outputs.

EXTRACURRICULARS & LEADERSHIP

Women in Computing (WiC)

2025 - Current

UI/UX and Graphic Designer

Long Beach, CA

- Created UI/UX assets and web mockups in Figma in collaboration with the development team to launch a hackathon portal.
- Coordinated with the design committee to craft logos and merchandise visuals using Procreate, Canva, and Adobe, helping define the project's brand identity.
- Guided team members in learning new design softwares to improve their ability to visualize and communicate concepts.

Independent Math Tutor

2023 - 2024

Calculus I and II Tutor

Long Beach, CA

- Led one-on-one and group tutoring sessions for freshman and sophomore students in Calculus I & II, adapting instruction to diverse learning styles.
- Created tailored practice materials aligned with class formats while introducing alternative problem-solving approaches.
- Improved exam performance and study habits, with 5+ students reporting higher scores and more consistent study routines.

Pride Club 2022 – 2023

President San Pedro, CA

- Organized a Day of Silence parade with my team to raise awareness of LGBTQIA+ discrimination and honor key figures, earning <u>local news coverage</u> and a <u>group interview feature</u>.
- Collaborated with team members to secure sponsorships and fundraise for event logistics and club resources.
- Delivered weekly lectures and curated media presentations on LGBTQ+ history and contributions to promote awareness and inclusivity.

WORK EXPERIENCE

Freelance Graphic Design

2024 - Current

Graphic Designer for Food Businesses

Torrance, CA

- Provided freelance graphic design services for an online baking business by creating cohesive branding materials.
- Created social media advertisements using Canva and Adobe Lightroom to enhance brand visibility and engagement.
- Designed 5+ seasonal holiday menus and one all-time menu tailored for digital and print use.