Mishka Mansukhani

khalil.mansukhani@gmail.com | (424) 308-7024 | Torrance, California | [GitHub/Portfolio](#)

EDUCATION

California State University of Long Beach   **Expected Graduation: 2027**

Bachelor of Science, Computer Science ● **GPA: 3.6**   *Long Beach, CA*

- **Awards**: President's Honor List (2023 - 2024), Dean's List (2024 - 2025)
- **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, Canva, Adobe Lightroom, NomadSculpt, Womp3D, Procreate
- **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, optimized for replayability through random map seeds and responsive controls.
- Implemented real-time physics, collision detection, and friction-based movement using p5.js to simulate responsive driving mechanics and enhance player interaction.
- 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, establishing a framework for integrating physics simulations in game development projects.
- Simulated physics phenomena with precision through momentum-based dynamics and kinematic formulations.
- Strengthen computation modeling skills by constructing real-time velocity, distance, and force graphs in VPython for data visualization.

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

- Engineered a real-time hand gesture recognition system on TouchDesigner using MediaPipe to control audio-visual media with <200ms response time for latency-free interactions.
- Configured custom gesture-to-action mapping layer using Python and computer vision techniques to manipulate playback, volume, and navigation commands across media modes.
- Conducted usability testing to analyze interaction patterns and response times, improving efficiency by 25% for common media operations compared to traditional keyboard-based input.

Card Game with Betting and Randomization Mechanics

- Developed a console-based card game in Python, simulating Three Card Monte with randomization and betting logic, while exploring object-oriented design through custom classes.
- 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 – Present
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 website portal for a hackathon (Marina Hacks) to enhance user experience.
- Coordinated with the design committee to craft logos, merchandise visuals, and promotional materials using Procreate and Canva to help establish a cohesive and recognizable brand identity for the project.
- Mentored team members in learning new design software and best practices, improving their ability to visualize ideas, communicate design concepts effectively, and contribute meaningfully to the project workflow.

Independent Math Tutor   2023 – 2024
Calculus I and II Tutor   *Long Beach, CA*
- Led one-on-one and group tutoring sessions for college freshman and sophomore students in Calculus I & II, adapting instruction to diverse learning styles to ensure comprehensive understanding.
- Created tailored practice materials aligned with class curriculum while introducing alternative problem-solving approaches, visual aids, and step-by-step explanations to reinforce conceptual mastery.
- Improved exam performance, problem solving skills and study habits, with 5+ students reporting higher scores, increased confidence in calculus subjects, and more effective 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 [local news coverage](#) and a [group interview feature](#).
- 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 – Present
Graphic Designer for Food Businesses   *Torrance, CA*
- Provided cohesive branding materials, including logos, menus, and social media assets, to strengthen brand identity, establish a consistent visual language, and support the business's marketing strategy.
- Created targeted advertisements and engaging visual content using Canva and Adobe Lightroom, increasing online visibility, social media engagement, and customer interaction.
- Designed 5+ seasonal holiday menus and a permanent menu optimized for both digital and print distribution, ensuring readability, aesthetic appeal, and alignment with brand messaging.