Samuel Tang

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EDUCATION

New York University, College of Arts & Science – New York, NY   **September 2022 – May 2026**
Bachelor of Arts in Computer Science | Minor: Game Design
Dean's List for Academic Year, 2022, 2023

New York University, Courant – New York, NY   **September 2025 – May 2027**
Master's in Computer Science

SKILLS

Coding: Python, Java, C#, C, C++, HTML, CSS, JavaScript
Technologies: VS Code, Git, Blender, Linux, Flask, MongoDB, Docker, Unity, Gamemaker Studio
Languages: English (native), Chinese (fluency at native level)

PROJECTS

Samuel's Room - Portfolio Website
- Built an interactive 3D portfolio environment from scratch, creating all 3D models, UV unwraps, texture maps, and baked light/normal maps in Blender, exported as optimized GLTF/DRACO assets.
- Implemented a custom Three.js WebGL rendering pipeline with custom shaders, lighting setups, mesh instancing, and performance tuning for smooth framerates on desktop and mobile.
- Designed GSAP-driven animation systems to coordinate camera movement, scene transitions, object interactions, and UI choreography into a cohesive experience.
- Integrated Howler.js audio and raycasting-based interactions (modal overlays, playable piano), resolving iOS Safari WebGL issues to keep the experience stable on mobile.

Lucky Flips - Luck-based Incremental Game
- Built an incremental game from the ground up in GML, including the core loop, coin-flip logic, progression systems, and UI.
- Designed a data-driven coin and upgrade system with tier-defined costs, rewards, and odds that control payouts, streak bonuses, and player progression.
- Implemented a state-driven gameplay loop that handles flip animations, applies tier odds, tracks streaks, triggers bonus events, and updates player rewards using controller objects.
- Created polished UI/UX with animated popups, responsive upgrade menus, real-time counters, and synchronized SFX tied to flips, upgrades, and events.

ScheduleGen - Course Scheduler Web App
- Built a full-stack course scheduler that generates valid, non-overlapping schedules from user-selected classes, credit targets, time windows, and priority rules.
- Implemented the Flask back-end with routes for schedule generation, user registration, login, and session management, paired with an HTML/CSS front-end for interactive input and results.
- Designed and integrated MongoDB collections for users, courses, and sections, with logic to query catalog data, detect time conflicts, and assemble schedule-ready combinations.
- Containerized the app with Docker and deployed it to DigitalOcean, configuring environment-based settings and persistent database connections for a reliable production-style deployment.

EXPERIENCE

IT Support Technician   **June 2025 – August 2025**
New York University – New York, NY
- Resolved 60+ individual IT support tickets and assisted colleagues in troubleshooting additional user issues to maintain smooth technical operations.
- Configured and deployed 50+ laptops for NYU College Admissions Leadership Institute students, ensuring proper imaging, user account setup, and system functionality.
- Assisted with moving, unboxing, labeling, and recording large volumes of new computer equipment into the office's asset database in preparation for the upcoming academic year.
- Participated in weekly team meetings to review open tickets and ensure prompt response to all support requests.
- Provided on-site technical support during university events and presentations, including setup assistance and live troubleshooting.

Game Studio Program Fellow   **September 2024 – January 2025**
EGD Collective – New York, NY
- Collaborated with a smaller specialized team within a larger department to develop *Project Dreamscape*, a game in Unity using C#, while also attending game jams, professional talks, conventions, and more events.
- Worked in a cross-disciplinary team environment with 100+ people that replicates a large AAA studio with an agile development workflow.
- Communicated between teams with scrum, verbal meetings, and written documentation.
- Created scripts for a versatile status effect system and prefab + script for a fireball projectile.