# **Deniel Chen**

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## **EDUCATION**

# **Carnegie Mellon University**

Pittsburgh, PA

Bachelor of Science in Information Systems | GPA: 3.77/4.00

Expected May 2028

• Relevant Coursework: Fundamentals of Programming, Concepts of Mathematics, Information Systems Milieux, IDeATe Intro to Unity Game Engine, Reasoning with Data, (Mis)Trust in Research

• Honors: Dean's List: Fall'24

#### WORK EXPERIENCE

Kumon League City, TX
Senior Math Instructor July 2021 - May 2023

• Provided individualized tutoring to over 80 students across various age groups and math levels.

- Supported students from diverse backgrounds, fostering patience, empathy, and understanding to address unique learning needs.
- Developed strong communication, problem-solving, and leadership skills while working effectively under pressure in a fast-paced environment.
- Played a pivotal role in improving students' academic performance and confidence in mathematics.

#### **PROJECTS**

# **Integrated Kwadropus**

League City, TX

Lead Developer and Integrator

September 2023 - May 2024

- Selected as a finalist among over 4,000 students nationwide in the NASA Hunch Program.
- Designed and prototyped the Integrated Kwadropus using Autodesk Inventor, creating a functional design that met NASA's detailed specifications.
- Coordinated with NASA engineers and mentors to implement feedback from the Preliminary Design Review (PDR) and finalize the prototype.
- Integrated components such as Arduinos, wiring systems, control mechanisms, mobility arm, duster arm, propulsion, and suction cups, ensuring seamless functionality and cohesive operation across all subsystems.
- Collaborated with teams developing subsystems, facilitating problem-solving, and driving project progress.

#### **Personal Godot Game (Crescent Moon)**

League City, TX

Game Developer

June 2023 - July 2023

- Designed and developed a top-down 2D farming simulation game using Godot Engine with a focus on engaging gameplay and polished mechanics.
- Implemented core gameplay features, including farming mechanics (tree cutting, planting, watering, and hoeing), NPC interactions (trading), and a modular inventory system.

## 15-122 Term Project (8-Ball Pool)

Pittsburgh, PA

Programmer

November 2024 - December 2024

- Developed a 2D rendition of the classic 8-ball pool game with realistic physics, sprite animations, and customizable gameplay options.
- Implemented physics-based mechanics, including ball movement, collisions, and shot impact calculations.
- Created a two-player competitive mode and a practice mode with adjustable shot power, rack sizes, and ball placement.

## **SKILLS & INTERESTS**

Programming Languages: Java, Python, JavaScript, Html/CSS, C#, Lua, GDScript

Interests: Game development, Hackathons, Artificial Intelligence, Physics Simulations, Robotics