# Tristan Mitsuji ODonnell Software Engineer

Backend and full-stack software engineer experienced in building APIs, data pipelines, and production-ready web applications. Seeking SWE internship opportunities using Python, FastAPI, React, and scalable system design, with a growing focus on AI.

## **INFO**

#### Location

Los Angeles, CA

#### **Email**

tristanodonnell100@gmail.com

#### **Phone**

8184399662

## **LINKS**

Linkedin

<u>Glthub</u>

<u>Portfolio</u>

## <u>SKILLS</u>

### Languages

- Python
- JavaScript
- C++
- C#

#### Backend & Web

- FastAPI
- React
- Pydantic
- httpx

#### **Game Engines & Systems**

- Unreal 5(Blueprints + C++, Behavior Trees, GAS)
- Unity (C#)

## **Developer Tools**

- Pycharm
- CLion
- Webstorm
- Render
- Git
- · Visual Studio
- VS Code

## **EDUCATION**

Associate in Science - Data Science

2025 - Present

Pasadena City College

**Unity Developer Certification** 

2024

University of California, Irvine

**Bachelor of Arts - Business Administration** 

2021

California State Polytechnic University, Pomona

## **PROJECTS**

#### Full-Stack / Backend Developer - Python / FastAPI / Data Engineering

2025 - Present

Kalshi Market Data Pipeline

- Building multi-layer data pipeline with snapshot ingestion, normalization, enrichment, scoring, and decision logic.
- Developing FastAPI backend exposing structured endpoints for desktop integration and automated analysis.
- Implementing caching, config-driven routing, and modular folder architecture for clean separation of pipeline stages.
- Creating research, signals, and feedback loops to support evaluative trading logic and iterative strategy testing.

## Full-Stack / Backend Developer - Python, FastAPI, React

2025

Pokemon Data Explorer

- Built FastAPI service wrapping PokéAPI with normalized models and structured endpoints.
- Developed React UI for search, detail views, and dynamic sprite loading.
- Deployed full-stack project on Render with environment variables and CORS setup.
- Added TTL caching and request optimization to reduce external API overhead.

#### Lead Programmer - Unreal Engine 5

2024 - 2025

Monstrum Arcana - Turn Based Battle

- Built core Battle System, managing turns, combat logic, and game flow.
- Created Score-Based AI Decision System for move/switch selection.
- · Created modular Move Calculator for damage, status, and effects during gameplay.
- Designed Modular Text Function to send customizable messages between systems and UI.
- · Developed Data-Driven Tools to streamline content creation for designers.

#### **Lead Programmer - Unity**

2024

Asteroid Fight Capstone Project

- Created player Class Select system applied on scene load.
- Built Round Manager to control enemy spawn rates and gameplay pacing.
- Created Weapon System with varied weapons, damage logic, and hitscan/projectile support.
- · Built Player Inventory System supporting interaction and pickups.
- · Created Shop System using Data Manager to spawn instances during gameplay.

## **PROFESSIONAL EXPERIENCE**

#### **Project Associate - Global Early Careers / Talent Brand**

2022 - 2024

Activision Blizzard, Irvine, USA

 Drove 3.3M site visits and 3K+ applications through multi-unit campaigns while leading branding, merchandising, and outreach for 10+ projects and 835 schools.