




TARO KUMAGAI

GAME ENGINEER


CONTACT

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EDUCATION

Bachelor of Science

Computer Science & Game
Design

DigiPen, Institute of Technology

April 2023

Redmond, WA

Bachelor of Science

Chemistry

UC Santa Cruz

June 2016

Santa Cruz, CA

SKILLS

Unity Engine

Unreal Engine 4

Visual Studio

C, C#, C++

Tortoise SVN, GitHub

Dear ImGui

Jira, Trello

FMod API, Wwise API

Language

English

Japanese

ACADEMIC PROJECT EXPERIENCE

Custom NavMesh Generator

AI Programmer / Unity Engine / Team Flaming Skeleton / DigiPen

January 2023 - April 2023

- Developed a Unity component to generate 2D NavMeshes, successfully distinguishing walkable terrain from obstacles in Unity-created meshes.
- Agents use A* Pathfinding with paths from the generated NavMesh.
- Engineered NavMesh debugging tools to differentiate obstacles, agent pathways, and walkable areas, streamlining level design process.

Grocery Gauntlet / 3D Split-Screen Party Game

UI & Generalist Programmer / Unreal 4 / Team Later Sk8ters / DigiPen

September 2022 - January 2023

- Redesigned UI menus, decreasing errors and streamlining navigation, resulting in better user engagement.
- Set up stat tracking for player gameplay so that they can be displayed at the end of each game
- Developed and integrated seamless UI menu controls for both gamepad and keyboard, enhancing user interface accessibility.

Runes of Legacy / Top-down Action Dungeon Crawler

AI & Audio Programmer / Unity Engine / Team Phantom Forge / DigiPen

September 2021 - May 2022

- Implementation of enemy finite state machine based behaviors
- Constructed FSMs to be adjustable for Game Designers through Unity's Inspector tab allowing them to adjust things such as projectiles being shot, movement speed, animation speed, player detection range, etc.
- Collaborated with Audio Designer to implement audio features with Wwise

Ironvale Grove / 2D Tug-of-War Strategy Game

Tech Lead / Custom C++ Engine / Team Knight Owls / DigiPen

September 2020 - April 2021

- Collaborated on crafting a custom C++ engine.
- Collaborated with Audio Designer to implement audio features with FMOD API
- Implementation of game engine editor features with Dear ImGui
- Management and delegation of tech team tasks

WORK EXPERIENCE

Station Supervisor

GAT Airline Ground Support (United Contract)

September 2023 - current / Sacramento, CA

- Delegating tasks to ramps agents in order to service inbound/outbound flights
- Operating pushback tractor to push them out and prepare planes for take off
- Services to plane include tasks such as cleaning, baggage handling, guiding planes in and out of gates.
- Making sure that ramp services are handled in a safe and efficient manner.

Gameplay & Audio Programmer (Volunteer)

Games for Love

October 2023 - February 2024 / Remote

- Working on minimum viable product build of a game called "Flight of Fluffle" (<https://fluffleteam.itch.io/flight-of-the-fluffle>)
- Worked on soft platform collision detection
- With collaboration with an audio designer, integrated and implemented SFX and music using FMOD Studio/API

Sales Engineer

Enplas Microtech Inc

September 2017 - July 2019 / Santa Clara, CA

- Communicated between clients and engineering team in Japan on the development of microfluidic products
- Assisted in the production of microfluidic plastic prototypes
- Examination and troubleshooting of microfluidic plastic products

Certificate Clerk

Overseas Merchandise Inspection Company (OMIC)

October 2016 - August 2017 / Sacramento, CA

- Issuing certificates for crops that underwent successful GMO and Chemical Residue Testing
- Maintaining samples and equipment in the office lab
- Crop sample preparation used for GMO and Chemical Residue Testing
- Inspection of rice mills and grading of rice samples