

DANIEL FRANCO

Los Angeles, CA

[Personal Website](#)

[LinkedIn](#)

EXPERIENCE FULL LIST OF WORK EXPERIENCE AND REFERENCES AVAILABLE UPON REQUEST

T-Mobile – Mobile Expert / Los Angeles, CA

June 2019 – Current

- Intimate working knowledge of modern cellular solutions while excelling in a quota-based sales environment.
- Second highest ranked representative in the region for 2022.
- Ability to adapt to a constantly evolving industry, excelled during the merger with Sprint.
- Top representative in the district: 2021: Jan, Feb, May, Jun, Oct, Nov. 2022: Feb, April, May, July, Aug.

Fullerton College – Calculus Instructor, Math Lab tutor / Fullerton, CA

Sept 2017 – June 2019

- Crafted and facilitated supplemental instruction classes for college students enrolled in Calculus II and III that encouraged collaborative learning, contributing to an overall improvement of 17% in grades among participating students.
- Face to face tutoring provided in the school's math lab, covering the following courses: College Algebra, Trigonometry, Calculus I, II, Multivariable Calculus, Linear Algebra, Discrete Math, Differential Equations.

[ChatGPT Interactive Resume](#)

Feb 2023 - Current

- Designed and executed a proof-of-concept conversational AI chatbot using the ChatGPT API to simulate natural human-like interactions
- The assistant harnessed the power of OpenAI's GPT-3 language model (LLM) to deliver immersive conversational experiences, employing advanced natural language processing (NLP) techniques for effective user input comprehension and response.
- Crafted an intuitive and visually engaging user interface with HTML and CSS, while leveraging Python and the Flask framework to manage diverse user interactions, dynamically generate responses, and implement robust data persistence for user preferences and conversation history.

Game Engine

Jan 2021 – May 2021

- Developed the initial render pipeline for a real-time renderer in DirectX11 to support custom 3D model formats, implementing a DX11 linked-list of fragments technique to optimize rendering efficiency and reduce processing time.
- Wrote a robust physics engine featuring AABB/OBB collision detection and raycast intersection checking capabilities.
- Optimized data architecture to maximize CPU cache utilization for core routines, resulting in a notable increase of 145% in rendered FPS.
- Leveraged compute shaders to transfer particle system update computations from the CPU to the GPU, resulting in a performance increase of 154%.

[Impasto](#)

May 2021 - Nov 2022

- Engineered gameplay systems for interaction, inventory, and advanced NPCs in Unity using C#. Actively identified and resolved bugs at various stages of the project lifecycle, contributing to enhanced stability and overall quality of the software
- Developed fluid player movement and integrated visual effects for both the environment and items in tandem with the usability and quality assurance teams.
- Coded scripts to enable interactions with objects, seamlessly integrating items into an inventory system.
- Translated all dialogue and text-based elements into Spanish, ensuring accessibility and inclusivity for an expanded playerbase.
- Provided voice work for two characters, adding authenticity and depth to the gaming experience.

[Fatal Sting](#)

Jan 2021 – May 2021

- Created in Unity, leveraging scriptable objects to craft a designer-friendly interface. This approach eliminated the need for singletons and other dependencies within components, enabling independent behavior and enhancing flexibility in game development.
- Programmed the entirety of the combat system with future expansion as the goal, abstracting the combat mechanics and character composition to allow for ease of expansion of roster and moveset.

[CPU Raytracer](#)

Apr 2022

- Built a ray tracer capable of rendering opaque surfaces (polygons and spheres) with proper lighting and shadows
- Leveraged multi-threading system to dramatically improve render performance by 234.3%, distributing light trace calculations across CPU cores.
- Utilized spatial acceleration structure (octrees) to cut rendering time by 42.6%.

Global Language Solutions – Project Manager / Irvine, CA

Jan 2013 – Jun 2016

- Coordinated and managed delivery of multiple translation projects to clients.
- Accountable for project status, client relationships, and ensuring quality and service to always meet expectations. Identifying new strategies, approaches or workflows with clients for continued improvement. Extremely detail oriented.
- Confident, articulate, and professional linguistic proficiency.

- Provided detailed feedback and suggestions to the localization teams and translators, contributing to the improvement of the localization quality and overall player experience.
- Wrote detailed reports on each bug found using the internal bug tracking system and then re-tested when the development team reported the fix. Looked for program bugs, spelling mistakes, graphical or audio glitches and even copyright issues. Found on average 150 bugs a month.
- Took screenshots that were used in press publications. My name appears on 3 game credits.

EDUCATION

UNIVERSITY OF SOUTHERN CALIFORNIA
Viterbi School of Engineering, GPA: 3.8

Aug 2019 – May 2022

B.S. Computer Science Games

FULLERTON COLLEGE, GPA: 3.86

Sept 2016 – May 2019

A.S. Computer Science & Mathematics

A.A. Foreign Language & IDS: Science & Mathematics

SKILLS

Coding Languages: C++, C, C#, Java, Python, HLSL, MySQL, Lua, HTML/CSS, JavaScript, Flask

Game Related: Game design for mechanics, levels, and player UI; business management of games

Applications: Unity, Unreal Engine, Perforce, Adobe Illustrator, Photoshop, OpenGL, DirectX, Maya, Git

Languages: English (Native), Spanish (Native), Japanese (Conversational)