Michael Yuen

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Education

August 2019-May 2021

University of Southern California

Los Angeles, CA

- Masters of Science in Computer Science; GPA: 4.00, MS Honors
- Relevant Coursework: databases, algorithms, game machine learning, mobile games, game network architectures, web tech
- Grader for software engineering, graduate databases, programming systems, mobile games, Lead Grader and TA for AI

August 2016-June 2019

University of California, Irvine

Irvine, CA

- Bachelors of Science in Computer Science specializing in Intelligence Systems; GPA: 3.79, Cum Laude
- Relevant Coursework: databases, operating systems, artificial intelligence, data structures, analysis of algorithms, machine learning, game development, information retrieval, graph theory, computer vision

Work Experience

September 2022-Present

Norvoc Bioscience Software Developer

Irvine, CA

- Working in a biotech company. Project is focused on data visualization and making the data interactive from ML models
- Built this project using React, Node is, Mongodb, Synology servers, and Three is for visualization
- Specific React features used are splitting the rendering of html into different components and using state to save data from the ML models pulled from the routes of the proxy server of Node.js queried from the Mongodb database hosted on Synology
- Using Three is to create generalized cylinders, along with using open GLSL to write shader code for a gradient

July 2021-August 2022

Microscape Full Stack/Unity Developer

Los Angeles, CA

- Worked in a startup in biotech focused on a product that allows users to add medical data and render the data as a 3D image
- Implemented multiplayer functionality with rooms and multi-user interaction for the application with Photon
- Adjusted the volume renderer algorithm and worked on different shader, cropping, filtering adjustments to the image
- Adjusted sliders to work on the VR medium, including annotations using a brush tool
- Used AWS Lambda to save and load filtering/cropping/shader settings that are set for a specific image
- Added a multi asset feature, allowing for users to load in multiple 3D image assets and change their transforms, filters, etc

April 2022-Present

Prism Unity Developer

Los Angeles, CA

- Working in a startup (part time) in biotech focused on a product using IoT to interact with a Unity game application
- Prototyped games including a new minigame involving shooting a slingshot with breathing rate of a Polar waistband
- Worked on a breathing game that used a chromium web browser to watch Netflix, Spotify, etc while gathering medical data
- Helped add small features such as UI popups and UI functionality to a flappy bird game

Projects

January 2021-May 2021

Inside Job

- Used the Unity Engine and the Photon network architecture to create a simple social deduction game
- Built a lobby system using Photon's Room properties, allowing players to create and join games hosted in different locations
- Built a better dead reckoning system for synchronization of game objects for moving, shooting, and interacting with objects
- Built a proximity text and voice chat from Photon's Chat and Voice API

January 2020-May 2020

Dungeon Smiths

- Used the Unity Engine to create a unique mobile (Android) maze crawler game with a group of 6 people
- Game has an exterior 3D maze that forces the player into 2D minigames upon reaching an enemy
- Developed multiple minigames including two final bosses, simple cutscenes, and dialogue functionality
- Utilized Agile development through Sprints and iterative development in Github

April 2019-June 2019

Object Reconstruction

- Took many images of a dragon model using a set of scanners and a projector
- Used Python's OpenCV and Numpy libraries to generate a mesh from the images taken from scanners
- Used camera calibration to determine camera parameters, generated a baseline mesh from triangulation
- Finalized a mesh from MeshLab using alignment and poisson surface reconstruction

Skills

- Languages: Proficient: Python, C#; Familiar: Java, SQL, HTML, CSS, Javascript, C++
- Systems and Software: Windows, Linux, Oracle VM, Visual Studio, Eclipse, Jupyter Notebooks, Numpy stack, Unity Engine, Git, Android Studio, NodeJS, Flask, Azure, GCP, AWS Lambda, MongoDB, Photon, Oculus VR, React, Three.js