

Jacob Ugalde

Creative Programmer | Los Angeles, CA

Work Experience

Freelance Web Designer (Los Angeles) Fall 2020 – Present

- Built and designed websites for clients on Squarespace and WordPress
- Independently led; coded additional styles and features from scratch
- Maintained regular client communication to ensure accuracy and timely satisfaction

Software Developer, General Atomics (San Diego) July 2018 – June 2019

- Developed embedded software for Databases, Data Visualization, and UI/UX Design
 - Designed database and screen visuals to capture material testing data from a remote lab using PostgreSQL, Pandas, Python, and Flask, allowing workers to clearly track and monitor equipment output
 - Developed website visuals to compare real-time machine learning predictions against real engine output via Plotly, Datatables, and jQuery to showcase quality and accuracy of robotics AI to clients
 - Engineered and designed UI/UX for intranet sites with React/SQL to query and modify project databases in a clear and uniform manner, such that employees and clients of varying permissions can efficiently traverse data
- Represented General Atomics at remote meetings and presentations
 - Worked with leadership team to define metrics and optimize workflow for upcoming projects
- Wrote project design, requirements, user manual, and progress documentation

Project Experience

OwO Bot, Creator Ongoing, Created Spring 2020

Twitter bot created using JavaScript, JSON, Twitter API, Uptime Robot, and glitch.io

- Assembled a complete and autonomous bot using various microservices to post online
- Regularly monitored status and online feedback; updated code as necessary

Paint The Town, Game Designer/Programmer Fall 2017 – Spring 2018

Multiplayer VR game created in Unity/C# for Oculus Rift

- Worked with a team to design and implement a VR game with online matchmaking
- Programmed movement, UI/UX, and custom shaders (via Unity's shader engine)
- Implemented online matchmaking via Photon Unity Networking (PUN)

Bubbles: Agents of Change, Technician Spring 2018

Digital art exhibit on temporary display at the Birch Aquarium in La Jolla, CA

- Worked with professors and peers on a temporary exhibit on the science of bubbles
- Constructed a network of Raspberry Pi's and Arduinos via Python to respond to input
- Administered message passing interface, switches, and WiFi connections to sync data

WayAround, Software Developer Winter 2018

Mobile web app for pathfinding programmed in HTML, CSS, and JavaScript

- Iteratively researched, tested, developed storyboards into paper prototypes and a web app
- Utilized crowdsourcing and Google Maps to determine routes based on preferred detours
- Managed a team of 4 by delegating responsibilities and documenting weekly progress
- Showcased, marketed final result expo-style while responding to faculty and peer feedback

Contact Details

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Education

University of California, San Diego **Graduated June 2018**

- BA in Interdisciplinary Computing and the Arts; Minor in Computer Science
- Provost Honors (2014-2018)
- GPA: 3.57
- **Extracurriculars:** Theater Actor, Performance Director for A Cappella

UCSD Global Seminars (Study Abroad in Japan) **Summer 2017**

- Examined modern technology in respect to visual culture

Languages & Engines

C/C++/C#

CSS/HTML/Flask

JavaScript/jQuery/React

SQL/PostgreSQL/Pandas

Python

Docker

Java

Unity

Tools & Environments

Git/Bitbucket

Jira/Atlassian Suite

Scrum/Agile

MS Visual Studio

Notepad++

Jupyter Notebook

Raspberry Pi/Arduino

Windows 10/UNIX/LINUX

PyTTY