

Derek Iniguez

Corona, CA 92879 • derekini.dev@gmail.com • [Github](#) • [Website](#)

EDUCATION

Cal State University, Monterey Bay

August 2016 – December 2020

- B.S. degree in Computer Science with a specialization in Game Development.

WORK EXPERIENCE

Digital NEST

February 2018 – December 2019

Teacher's Assistant, Salinas

- Digital NEST teaches young students the technical skills needed for the digital world such as web and software development.
- Fostered a positive learning environment by answering programming questions and assisting with student projects.
- Multi-tasked responsibilities like providing assistance to students in navigating problems with Unity and C#, as well as providing counsel to team members when facing difficulties explaining concepts to students.
- Oversaw projects making sure that the students were keeping up with the lesson plans and understood.

VR Project for Digital NEST (Unity C#)

- Oversaw the creation of a game in VR using Unity, Oculus, and C# while paired with a group of students as well as a "client."
- Client outlined their requests revolving around grabbing objects in VR to perform behind-the-desk tasks.

PROJECTS

2D Endless Cube Runner (Unity C#)

In progress

- Set different possible outcomes for procedural level generation using a Markov chain.
- Created a shop where players can purchase songs, skins, lights, and particle effects via in-game-currency.
- Used Object Pooling to create instances of falling tiles and reuse them throughout the level's generation.

www.derekiniguez.com (HTML, CSS, JavaScript)

November 2022

- Designed and implemented a website to showcase my indie games developed in Unity.
- Created a honeypot and successfully reduced spam messages sent to personal email by 86%.
- Scripted the navbar to follow users down the page and structured the site to be responsive and mobile friendly.

Zombie Survival Game VR (Unity C#)

May 2022

- Used XR plug-in framework to support VR [project](#) and Object Pooling to create/store multiple game objects.
- Applied navigation and pathfinding to AIs to maneuver the environment and pursue target – player.
- Programmed interactive User Interface design for win case, lose case, tutorial, main and pause menus.
- Experimented with abilities for in-game movement such as snap turning and smooth, continuous movement.

Obstacle Dodging Mobile Game (Unity C#)

June 2021

- Instantiated several different objects at runtime with randomized size, color, light, position, and speed.
- Made speed of objects depend on: randomized speed at runtime and total power ups the player has collected.
- Final projects became a multi-platform game playable on [PC](#) and [Android](#).

Virtual Aquarium Tank System (Unity C#)

December 2020

- Created the Fish Evaluation Vector for [VATS](#) utilizing JSON files filled with databases of knowledge on sea life, including: name, scientific name, animal type, habitat, depth, size, diet, range, and conservation status.
- Provided a responsive UI that swaps through the different information and 3D models found online.
- Augmented post processing effects to elicit better visuals for the ocean with color grading, depth of field, motion blur, saturation and vignette.

iTag (Swift)

December 2020

- [iTag](#), a group project, is an augmented reality tag game application where players can sign up and join.
- Features mini maps, real-time notifications and tracking of other tag participants.
- Our group won an [award](#) for Most Innovative App for CodePath's IOS Virtual Demo Day.

Fur Buds Project (EJS, JS, CSS)

December 2020

- [Website](#) centered around adopting pets using a SQL database to keep track of pets.
- Features our mission statement, login/logout page, links to learn more and donate, and a newsletter.

University Website Projects (HTML, CSS, JavaScript, EJS, jQuery & AJAX)

December 2020

- Developed a [US geography quiz](#) that asks 10 questions with different types of inputs, grades users, and keeps track of attempts.
- Made my own [open library](#) that retrieves book info and its cover image from openlibrary.org using an ISBN number.
- Created an informational [website](#) on game development featuring an API that retrieves new motivational quotes every refresh.
- [Sign-up form](#) that checks password confirmation, and uses API to display city, coordinates, state, and county.

Parstagram (Swift)

November 2020

- [Instagram clone](#) with a custom Parse backend that allows a user to post photos and view a global photos feed.
- Users can sign up to create a new account, login, take a photo, add a caption, and post it to the server.
- Can stay logged in across restarts, log out, view comments on a post, and add a new comment.

Tweeter (Swift)

October 2020

- [Twitter mockup](#) where a user can view tweets with user profile pic, username, and tweet text.
- Users can login, log out, stay logged in across restarts, compose and favorite tweets.
- Past tweets get loaded in infinitely, and can pull down to refresh.

Flixter (Swift)

September 2020

- Movie browsing [app](#) like Netflix where users can tap a cell to see more details about a particular movie.
- Can view and scroll through a list of movies now playing in theaters.
- A Detailed screen of the movie can be seen by tapping a poster in the collection view.
- App can be viewed on various device sizes and orientations.

COMPUTER SKILLS

Programming Skills

- **C#, C++, SQLite, HTML, CSS, JavaScript, EJS, jQuery, AJAX, Swift**

Software

- **Visual Studio, Unity3D, Unreal Engine 4, Github, Blender, DirectX, Xcode, AWS**

ACCOMPLISHMENTS

- Published [my app](#) on the Android Store (2022)
- Dean's List (2020)
- [Most Innovative App](#) for CodePath's IOS Virtual Demo Day (2020)