

Justin Almendral

Game Programmer



CONTACT.

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EDUCATION.

- **Northeastern University**
May 2024 • GPA: 3.94
B.S. Computer Engineering

Minors:

- Robotics
- Game Design

Relevant Coursework:

- Object-Oriented Design
- Rapid Idea Prototyping
- Fundamentals of Engineering Algorithms



SKILLS & INTERESTS.

Game Engines •

Unity, Godot, Ren'Py

Programming Languages •

Python, C++,
MATLAB, ADA, Java

Engineering Software •

Fusion360, OnShape,
Solidworks, AutoCAD,
Intel Quartus Prime

Other Software •

Ableton Live 10, Aseprite

Interests •

Music Composition, 3D
Printing, Hiking, Pixel Art

PROJECTS.

Lethal Position, Programmer

July 2021

- Alternative reality adventure-puzzle game developed in Unity for the android platform using ARFoundation
- Worked alongside composer to use FMOD for sound and music implementation
- Designed scripts for ordered interactions, code locks, and draggable elements
- Implemented 3D assets into Unity engine with tap interactability

Habit of Force, Programmer

Oct 2020 - May 2021

- Designed a fill-in-the-blank poetry scene that tracked user selection to determine future plot progression
- Developed Dialogue System for mecha turn-based strategy game created in Unity
- Implemented Dialogue Storage System using Scriptable Objects and Yarn Spinner that compartmentalized all dialogue processing and triggers for each scene
- Created Dialogue Trigger System that checked and processed dialogue for 3 different occurrences

Telegram JSON Text Analyzer, Creator

Jul 2020 - Aug 2020

- Developed a program in Python that provides users statistical information from JSON files exported from Telegram
- Incorporated tools from the gensim and nltk libraries to search through texts and return related words
- Implemented function that uses JSON file text data to create bar graphs showing frequency of messages by user and time
- Created graphical user interface using tkinter library to allow user to provide paths to .JSON and .txt files for analysis

EXPERIENCE.

MatrixSpace, Intern • Burlington, MA

Sep 2021 - Dec 2021

- Trained neural networks using Pytorch in Jupyter Notebooks for the recognition of vehicles and people in 360-camera images
- Implemented depth and image detection analysis networks to approximate the average depth of drones and people detected in 360-camera images
- Converted the Monodepth2 Neural Network into ONNX and TensorRT files for the efficient running of depth and detection analysis on the embedded Jetson Nano platform

General Dynamics Electric Boat, Co-op • New London, CT

Feb 2021 - Jun 2021

- Managed and documented over 300 unit test requirements for embedded software using IBM Rational DOORS
- Designed plans for and conducted 10 unit tests using VectorCast and IBM Rational Change for embedded software programmed in ADA
- Provided data for determining OS by analyzing network performance samples between Linux and VXWorks using KernelShark and Wind River Workbench

Grotto Engineering, Engineering Intern • Cranford, NJ

Jan 2019 - Jun 2019

- Conducted research and compiled materials regarding the construction of swales for company presentations to the Clark municipality
- Calculated street and plot dimensions in over 15 properties using Civil3D and AutoCAD for planned drainage projects
- Extrapolated data from past quotes to create formulas for pricing of road improvements