

Education

FLORIDA INTERNATIONAL UNIVERSITY
Computer Science, BA

JUNE 2021 – APRIL 2025
Miami, Florida

Skills

Software Development: Python 3, Java, C#, Visual Studio 2019/2022, Lightship, ARDK API, AWS, MySQL, Node.js

Game Development: Blueprint Scripting, Unreal Engine 4/5, Unity 2020-2023, UMG, Blender, VRC SDK, UdonSharp

Operating Systems: HoloLens 2, iOS, Android, Oculus 2/Pro

Relevant Experience

HASH STUDIOS
Technical Co-Founder (Software Engineering Focus)

JULY 2024 – PRESENT 2024
Miami, Florida

- Managed a *MySQL* database, optimizing storage and retrieval processes for user data like *emails*, Patreon *usernames*, subscription *tiers*, and *visual assets*, ensuring secure handling.
- Developed backend systems in *C#* and *UdonSharp* for Unity menus, focusing on user-interaction that enhanced event management and user experience in VRChat’s social environments.
- Engineered a user management menu in *Unity*’s 3D-world space using *C#* and *VRC SDK* for VRChat, allowing network-wide control over roles, bans, and teleportation, with *head tracking* to adjust for avatar size and movement.
- Automated UI code generation with a *Python* script, saving 2-3 hours per project and reducing errors.

FIU ROBOTICS AND DIGITAL FABRICATION LAB
Student Senior Robotic Lab Assistant

AUGUST 2022 – SEPTEMBER 2024
Miami, Florida

- Developed AR/VR applications to engage children and parents in interactive activities, encouraging physical movement and exploration.
- Conducted research on *VPS* in Lightship for accurate spatial localization and *ARDK* for immersive AR experiences including *object rendering*, event-driven spawning, and real-time progress tracking.
- Led the development of cross-platform interactive applications for *iOS* and *Android*, utilizing *Visual Studio*, *XCode*, and *Android SDK/NDK* to ensure seamless user interaction.
- Worked on an *MRTK* project for *HoloLens*, integrating mixed reality tools with *Vuforia* to create an immersive learning environment, involving object grabbing, menu interactions, and visual tracking to enhance learning with Arduino.

MIAMI-DADE COUNTY
Data Science Intern

MAY 2024 – MAY 2024
Miami, Florida

- Developed predictive models in *Python*, using *correlation matrix heatmaps* to identify key trends and inform data-driven policy recommendations.
- Designed and presented *Power BI* dashboards analyzing gender-based sentencing patterns, providing insights that guided leadership decisions.
- Utilized *Microsoft Teams* for effective team communication and collaboration, ensuring seamless project coordination.
- Managed version control and project workflows using *Azure DevOps* and *Git*, maintaining code quality and smooth collaboration.
- Presented final project outcomes and reports to senior leadership, including the CIO of Miami-Dade County IT

VEU
Lead UdonSharp Developer

MAY 2023 – AUGUST 2023
Miami, Florida

- Collaborated with a 9-member team to design a VR world for a significant community event, hosting over 100 attendees.
- Conceived and developed a suite of 12 Unity tools enhancing user experience, including passcode-protected doors, authorized control panels, light management systems, a post-processing user menu, among others.
- Leveraged tools and platforms such as Unity, GitHub, Blender, and Visual Studio 2019 for comprehensive development and integration.

Volunteer Experience

INIT

Product Manager & Director

OCTOBER 2022 – PRESENT

Miami, Florida

- Acted as one of three key product managers, guiding a dynamic team of 20 to successfully develop and release a game within a challenging 2-month window.
- Played a pivotal role in the development for the prominent Miami event, "INIT Build," showcasing our team's capabilities on a large stage.
- Strategically scheduled and coordinated meetings using Trello across three departments, ensuring clear communication and synchronization among department leads.
- Seamlessly integrated and managed core development tools such as Unity, GitHub, Blender, and Visual Studio 2019, facilitating smooth project progression and enhancing team efficiency.

INIT

Product Manager

OCTOBER 2022 – PRESENT

Miami, Florida

- Spearheaded a dedicated team of 10, driving the successful development and shipment of a game within an aggressive 2-month timeframe.
- Instituted Trello across three departments, ensuring streamlined workflows and fostering seamless communication between department leads.
- Managed and coordinated essential development tools, including Unity, GitHub, Blender, and Visual Studio 2019, to empower the team and enhance product quality.

GOOGLE DEVELOPER STUDENT CLUB

Game Development Technology Leader

OCTOBER 2021 - PRESENT

Miami, Florida

- Instructed classes on pivotal game development topics including optimization, animations, and scripting, further solidifying a reputation as an industry knowledge bearer and mentor.
- Lauded by the Administrative Team for fostering an environment of mentorship and promoting game development education among peers.
- Honored as the "Developer of the Month" in acknowledgment of unparalleled dedication and consistent progress in game development.
- Gained respect from peers for proactively sharing game development milestones and insights across multiple platforms, including YouTube, personal website, and LinkedIn.

Relevant Projects

UDONSHARP DATA STRUCTURES PROJECT

Udon Developer

JUNE 2023 – AUGUST 2023

C# & Unity & Visual Studio 2022

- Utilized C# and Unity's *Visual Studio* integration to ensure seamless functionality and performance in VRChat environments, addressing inherent platform constraints.
- Designed and implemented essential data structures in *UdonSharp*, including *ArrayLists* and *HashMaps*, to overcome UdonSharp's limitations by developing custom solutions from the ground up.

NETWORKING MULTIPLAYER PROTOTYPE

Game Developer

JUNE 2022 – SEPTEMBER 2022

Unreal Engine 5 & Blueprint Programming

- Utilized a third-party plugin, AdvancedSessions, and Game Instances to produce a multiplayer FPS game that allows for community server hosting with a total of 3 game modes and 32 in-game customizable options.
- Calculated and performed development of server-client operations, inventory management, weapon polymorphism, client character inheritance, and replication.
- Designed in-game UI using UMG, AI-based imagery, Photoshop, Gimp, and previous design experience.

TWO WEEK-LONG ITCH.IO GAMEJAM PROJECT

Software Developer

MAY 2022 – MAY 2022

Unreal Engine 5 & Blueprint Programming

- Partnered with executive of OM Global to produce a well-polished first-person horror product in the span of two weeks.
- Awarded 2nd place in a competition with 57 other developers.
- Requested for continued involvement in upcoming competitions by competition hosts.

Awards & Certifications

UNITY CERTIFIED USER (PROGRAMMER)

Developer of The Month

APRIL 2023

Miami, Florida