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Vincent Aliquo

Software Engineer & Game Developer

Work and Experience

Chief Technical Engineer - Athla/Timelab LLC
Dec 2020 - Present

• Contracted as a full stack developer to build a web app using Python 3.7 with Google's App Engine and Azure. I built a robust, patent pending calendar management solution that scales to thousands of users.

• I wrote an algorithm that can reschedule a calendar event in a calendar filled with hundreds of weekly events across numerous cross-platform calendar services between 0.5-2 seconds depending on user command complexity.

• Set up subscription and payment services in the backend and frontend using the Stripe API

• Responsible for front-end and back end architecture.

Lead Programmer, Heartdrop Games 點心遊戲 (Unity3D)
June 2020 - Present

I established the tech pipelines to ensure the game runs smoothly while maintaining the strict artistic direction. I programmed many of the base mechanic systems so the other programmers and designers can work quickly. My main roles aside from optimization is AI, combat, and animation programming.

• C# programming
• AI programming
• Level generation
• Unity3D
• FMOD
• GitHub

Online Instructor, iD Tech & Wyzant
Dec 2020 - Mar 2021

I taught Unreal Engine 4, PyMel, Python, Java, Unity3D, and Oculus Quest 2 VR headset. Teaching people requires quick debugging skills, verbal communication, and clear and concise writing. I tutor kids and adults alike. I write code for people to read and modify, so I take the necessary steps to ensure legibility. I primarily taught Unreal Engine 4, specifically material creation, BluePrint, VFX, and VR.

• Unreal Engine 4
• Unity3D
• Java
• Python
• PyMel
• Oculus Quest 2

Lead Programmer, Umbra, Global Game Jam (Unity3D)
Jan 2021

As the lead programmer, I was able to quickly establish the core tech pipeline and delegate tasks to the other developers. My primary focus was programming AI and animations.

• C# programming
• AI programming
• Animation programming
• Unity3D
• Unity Teams
• Premiere

Lead Programmer, Zoélie (UE4)
Jan 2020 - July 2020

I managed my team of programmers as the lead as well as delegated and documented their work as a SCRUM master. Some of my many roles include asset optimization and caching, streaming, engine and lighting builds, and code analysis using the SOLID framework. We used both BluePrint and C++, primarily to debug the engine and help with optimization.

Specific Roles: AI, bird flocking behavior, 3d pathfinding algorithm, sound programming and implementation (recreating Wwise functionality), UI waypoint systems, level streaming, emergent dialogue, see-through camo effect.

Zoélie was finalist and received a Highly Commended award for The Rookies 2020 Game of the Year or Console & PC. Also shown at the Epic Educator Event 2020 and was the Unreal Engine Spring 2021 Student Showcase.

Interviews: Animation Career Review; CW69 Atlanta; Savannah Now; SCAD GamingFest: The Making of Zoélie

- BluePrint
- C++
- Profiling
- SCRUM Master/Agile
- Unreal Engine 4
- Maya
- Photoshop
- Audacity
- Perforce

Steam Page Rookies Page

Website Director – SCAD Student Media
Apr 2017 - May 2020

- Build/design/manage the websites for SCAD District (news), SCAD Radio (college radio), Port City Review (annual art book), The Manor (fashion), and Render Q (digital media blog).

- While a director, SCAD District won the best online newspaper from the Savannah State University in 2019 and 2nd place for the best website from the Georgia Press Association in 2020.

- Improved SEO practices across all sites.

Solo Project, 太子站 Prince Edward Station MTR (UE4)
Sept 2019 - Dec 2019

My focus was material functions, animations, and transitions. I modeled, textured, and made the audio for the whole scene. I wrote post-processing shaders to emulate CCTV screens, created particle effects, and used sequencer to craft a unified experience.

- Modelling
- Texturing
- UVs
- VFX
- Sequencer
- Post-processing shader
- Materials
- Unreal Engine 4
- Substance Painter
- Photoshop
- Audacity
- Premiere

Engineer – Make Meaningful Work, Apogee
Feb - Jun 2019

- Functionality prototyping and R&D. Aided in construction and design of makemeaningfulwork.com

- Helped construct curriculum for workshop.

- I created the base system that large firms used to go through courses together.

- JavaScript
- HTML5
- CSS3
- WordPress

Lead Programmer, Digifashmash (Unity3D)
Apr 2019 - May 2019

I developed a proof-of-concept app to display a fashion garment with cloth simulation through AR devices. My job was to establish the main pipeline and ensure that the garment could function and be performant on ARM architecture. The garment is realized in 3D and went through numerous software to both create and simulate the fabric.

- C# programming
- AR implementation
- Unity3D
- Android Studio

Engineer, Shootshi (Unity3D)
Apr 2019 - May 2019

I was in charge of researching and developing the AR and any other technical aspects of the project. We were able to develop a competent proof of concept that merges physical game pieces with a digital board. I used Augmented Images to scan game pieces on the board to both register the pieces with the digital game, but also place characters on them.

- C# programming
- AR implementation
- Unity3D
- Android Studio

Lead Programmer, Digifashmash (Unity3D)
Apr 2019 - May 2019

I developed a proof-of-concept app to display a fashion garment with cloth simulation through AR devices. My job was to establish the main pipeline and ensure that the garment could function and be performant on ARM architecture. The garment is realized in 3D and went through numerous software to both create and simulate the fabric.

- C# programming
- AR implementation
- Unity3D
- Android Studio

Solo Project, The Wharf (Unity3D)
Jan 2019 - Apr 2019

I developed a full cinematic infinite looping experience in Unity3D based on a Maine wharf. Programming cinematics is a challenge and having full control over every detail of the creation process helped immensely.

- C# programming
- Modelling
- Texturing
- UVs
- LODs
- Unity3D
- Maya
- Substance Painter
- Photoshop

Programmer, H-O-H.ME, Global Game Jam (Unity3D)
Jan 2019

I programmed core mechanics and animations for H-O-H.ME.

- C# programming
- Animation programming
- Mechanics
- Unity3D
- Maya
- Photoshop

Co-designer, SPACEONAUTS® (Board game)
Oct 2017 - Aug 2018

Spaceonauts!® is a competitive card game for 2-4 players of all ages. Players compete to build the most impressive spaceship they can before they launch into space at the end of the game. The player with the highest amount of points—determined by the Ship, Spaceonaut, and Launch cards—by the end of the game achieves victory! For this game, I made the card, box, and rule designs. I was also in charge of the manufacturing process of the game.

- Producer
- Co-designer
- Card & box design
- Translation overseer
- Trailer editor
- Premiere
- Clip Studio Paint
- Photoshop

Solo Project, Murder at a Suburban Home (UE4)
Jan 2018 - May 2018

I modeled, textured, and animated the whole scene. My focus was developing optimized, coherent, and well documented game assets.

- UVs
- Materials
- 3D Modeling
- BluePrints
- LODs
- Substance Painter
- Maya
- Photoshop
- Unreal Engine 4

Programmer, Radio Silence (Unity3D)
Jan 2018

I programmed the cinematics and movement system for the game.

- C# programming
- Unity3D
- Maya

Lead Programmer, Abysm (Game Maker Studio)
Jan 2014 - June 2017

I was a lead programmer of a team of eight developing a 2.5 hour experience. I, alongside some of my fellow programmers, developed over 20 unique AI, programmed cinematic experiences across 30 levels, and did extensive system programming.

- GML programming
- Level design
- Game Maker Studio
- Audacity
- Clip Studio Paint

Key Strengths

Skills

Languages

Python/PyMel, Java, JavaScript/jQuery/AJAX, Processing, C, C#, C++, HTML5, CSS3, Lua, GML, BluePrint

Also familiar with: YAML, JSON, REST

Frameworks

Flask
Django

Services

Firebase
Google App Engine
Azure
Perforce
GitHub
Stripe

Software

Unity
Unreal Engine 4
Maya
Substance Painter
Visual Studio
Android Studio

Other Skills

Agile
Scrum
Project management
SEO
Google ARCore

Education

Savannah College of Art and Design,
Savannah, Georgia &
Sham Shui Po, Hong Kong
Graduated May 2020, Cum Laude

- Bachelor of Fine Arts--Interactive Design and Game Development

Awards

Highly Commended Award for Game of the Year, Zoélie
Jul, 2020 - The Rookies

1st Place, SCAD District - Best Online Newspaper
2019 - Savannah State University

2nd Place, SCAD District - Best Website
Feb 2020 - Georgia Press Association