

AGUSTIN JESUS DURAND DIAZ

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SUMMARY

Experienced and results-driven Senior Software Engineer with over 10 years of expertise in software and game development. Strongly focused on problem-solving and delivering high-quality code that exceeds project objectives. Possessing a passion for C++, computer graphics, and game engines, I have a proven track record of leading teams and contributing significantly to the development of various games using Unreal Engine in my recent jobs. Currently, I am undertaking a side project to develop a game engine from scratch, which has further enhanced my technical abilities and expanded my skill set. I am adept at working with cross-functional teams and have a keen eye for detail to ensure the seamless integration of different components in complex systems.

PROFESSIONAL EXPERIENCE

Tech Lead

Isoforce Games | 05/2022 - Present

- Led the software team, conducting software design sessions to develop technical solutions aligned with project requirements.
- Balanced quality and speed, ensuring efficient and effective product development.
- Estimated project timelines and coordinated with the team to meet deadlines.
- Collaborated with the team to follow and improve Agile processes.
- Interviewed, hired, and trained new team members to enhance their skills and knowledge.
- Performed code reviews to maintain high and consistent code quality across the team.
- Made decisions regarding technologies and tools to enhance productivity and product quality.
- Created collaborative relationships with other teams to facilitate communication and coordination.
- Communicated project goals and progress effectively to stakeholders.
- Designed, implemented, and tested new gameplay features to enhance the overall experience.
- Provided hands-on coding solutions and technical leadership to support the team directly.
- Provided recommended solutions and technical guidance to teammates, considering the project's overall impact.
- Technologies & Tools: Unreal Engine 5 (EOS, GAS, Networking), C++, Perforce, Rider.

Successfully **created a Multiplayer Arena in Unreal Engine 5**, showcasing cutting-edge features, utilizing EOS (Epic Online Services) for networking, Gameplay Ability System (GAS), and Docker for development and deployment and leveraging the power of C++ programming. **The game mode was developed from scratch within a 6-month timeframe**, highlighting our ability to deliver innovative and engaging experiences to players.

Lead Software Engineer

DeadMonkey, Inc | 09/2021 - 05/2022

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I successfully implemented new features into a top-down military game developed in Unreal Engine 4, effectively addressing critical issues and improving its overall functionality.

Senior Software Engineer

BairesDev | 04/2021 - 09/2021

- Client: **Miso Robotics**.
- Senior C++/Python Engineer in a project related to robotics.
- Implemented and tested new Flippy features.
- Technologies & Tools: ROS, C++, Python, and Linux.



<https://github.com/VgTajdd/>



<https://vgtajdd.github.io/>



<https://www.linkedin.com/in/agustin-jesus-durand-diaz/>

Software Designer (C++/Gaming)

Globant | 11/2020 - 04/2021

- Client: **Warner Bros Games (Unannounced Project)**.
- Implemented and tested rendering functionality for a UE4 plugin.
- Designed, implemented, and tested functionality for a crash reporting system.
- Technologies & Tools: Unreal Engine 4, C++.

Technology Lead

Infosys | 04/2020 - 11/2020

- Client: **Verizon**.
- Designed, implemented, and tested mediation apps (backend).
- Technologies & Tools: C++, Linux, Perl, SQL, Putty, Vim, Git & GitLab.

Software Engineer

Bamtang Games (Cancha) | 01/2016 - 03/2020

- Client: Transmin.
- Designed, implemented, and tested many features: 3D visualizer, statistics plots, DXF file loading, PDF report generation, etc.
- Technologies & Tools: C++, Qt, VTK, Assimp, Graphviz, SQLite, Python, etc.

Game Developer

Bamtang Games | 02/2012 - 01/2016

- Clients: **Disney, Namco Bandai, etc.**
- Designed, implemented, and tested gameplay features, UI, and tools in more than 10 successful video games for international clients using these technologies: AS3 (Flash), JavaScript (HTML5), and Haxe (OpenFL).
- Designed, implemented, and tested the map editor tool and gameplay features for the first video game developed in Peru for PS4 and Xbox: **Power Rangers**.

EDUCATION

National University of Engineering — Bachelor's Degree

- August 2007 - July 2012, Lima, Peru.
- **Mechatronics Engineering** (B.S. & Título Profesional)

LANGUAGES

- Spanish — Native
- English — Fluent
- French — Beginner
- Portuguese — Intermediate

COURSES

- **Unreal Multiplayer Master: Video Game Dev In C++ Course** | GameDev.tv | 2022
- **C++ Design Patterns: Behavioral** | LinkedIn Learning | 2021
- **SOLID** | Acámica & Udemy | 2021
- **Unreal Engine Blueprint Game Developer Online Course** | GameDev.tv | 2021
- **Converting Blueprint to C++** | Epic Games | 2020
- **An In-Depth Look at Real-Time Rendering** | Epic Games | 2020
- **C++ Best Practices for Developers** | LinkedIn Learning | 2020
- **C++ Advanced Topics** | LinkedIn Learning | 2020
- More certifications on LinkedIn.

TECHNICAL SKILLS

- Software design experience
- Game Engines & Games Architecture knowledge
- Game Engine Architecture knowledge
- Problem-solving



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SOFT SKILLS

- Leadership experience
 - Planning and task estimation
 - Agile development (Scrum)
 - Communication between multidisciplinary teams
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TECHNOLOGIES

- Languages: C++|C|Python|SQL|JavaScript|Perl|C#|AS3|Haxe|GLSL
 - APIs & Libraries: Qt5|VTK|Assimp|Qwt|Graphviz|OpenGL (GLFW, GLEW, GLAD)|FMOD|OpenFL|OpenCV
 - Tools: Visual Studio|VS Code|Rider|Tortoise (Git & SVN)|CMake|Vim|Xampp
 - Version Control: Git|GitHub|GitLab|Subversion (SVN)
 - SO: Windows|Linux|macOS
 - **Gaming:** UE4 & UE5, GAS, PlayFab, EOS, GameLift, Perforce
 - Other Tools: Jira, Confluence, Trello, ClickUp, Fibery
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SIDE PROJECTS

- Univer Game Engine (private repository): Game engine written in C++ using OpenGL(GLFW), FMOD, ImGui, GLM, etc.
 - Plugin Manager: Cross-platform plugin manager developed in C++.
 - Dependency Injection Container: Cross-platform dependency injection container developed in C++.
 - Jumping Jack: First game created with my game Engine (Univer) in only 1 week.
 - Simple Raytracer: Simple raytracer developed using pure C++.
 - SpriteSheet Generator: Bin Packing algorithm (recursion & binary trees) using C++ & Qt.
 - NeuroEvolver: Neuroevolution software written in Python.
 - Chess Engine: Chess engine written in C++.
 - Cubeland: 3D Game developed in Unity.
 - Rubik's Cube Simulator: Simulation of Rubik's Cube written in Haxe.
 - Interview Problems: Interview problems solved in C++.
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COLLEGE PROJECTS

- Fruits-vegetables classifier: Implemented in C++ using OpenCV (Digital image processing).
- Robotic arm: Implemented using PIC16F877A and servo motors. Controlled by a computer program developed in C#.
- PID tuning using Genetic Algorithms: Implemented in C++, this program generates values for a PID controller using GA.



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