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Bengaluru, Karnataka, India

MADHU SUDHAN R

Unity Developer

EDUCATION

Master of Computer Application (MCA)
RNS institute of Technology
VTU | 2016 - 2018

Bachelor of Computer Application (BCA)
V.V Pura College of Science
Bangalore University | 2012 - 2016

SKILL

- Unity 3D
- C#
- Game Development
- Augmented Reality
- Virtual Reality
- Mixed Reality
- OOPs
- Version Control
- Testing

ABOUT ME

As a Unity Developer based in Bangalore, I am dedicated to advancing the information technology and services industry by simulating real-world scenarios through digital materials. These innovative solutions effectively modernize corporate training programs. My expertise spans Unity 3D, AR, VR, MR, and Photoshop, supported by a strong engineering foundation with a Master of Computer Applications (MCA) focused on Computer Software Engineering.

EXPERIENCE

Senior Software Engineer
L&T Technology Services - Aug 2024 - Present

Senior Software Engineer
Veltris - Nov 2022 - Aug 2024

Senior Extended Reality Developer
OneOrigin - April 2021 - Nov 2022

Associate Software Engineer
Antiz Technologies Pvt. Ltd - February 2019 - April 2021

PROJECTS

Project Title : Glitch Application
Client : Jio Tesseract
Build platform : Unity 3D - VR

Glitch is a virtual reality application being developed exclusively for the upcoming jio glass. The game consists of six different levels where the user will learn different skills and tasks.

- Utilized Unity's physics system, specifically wheel colliders and rigidbody, to simulate vehicle movement and its interaction with the environment.
- Developed a quiz game using C# that retrieves randomized questions and answers through API calls, employing object-oriented programming (OOP) principles to design a modular and maintainable codebase.
- Achieved realistic lighting and global illumination for scene rendering.
- Managed animation controllers and blend trees for character animation control.
- Utilized design patterns such as Singleton for managing game state, Observer for event handling, and Factory for creating objects, to ensure code maintainability and scalability.

Project Title : AR - NAVI
Client : Toyota Connected India
Build platform : Unity 3D - Linux

The AR-NAVI project uses AR HUD for enhance navigation by providing real-time directions, speed, traffic info, and points of interest in the driver's line of sight, improving safety and convenience. They offer hands-free guidance, customizable displays, and night vision options for better navigation experiences.

- Real-time Data Integration: Successfully integrated real-time navigation data, including GPS coordinates, maps, and traffic information, using C# to provide accurate and up-to-date guidance within the AR HUD application.
- User-Centric UI Design: Played a key role in designing intuitive user interfaces within the AR HUD, allowing users to easily configure settings, customize display options, and interact seamlessly with the navigation system.
- Continuous Integration/Continuous Deployment (CI/CD): Implemented and managed CI/CD pipelines to streamline the development, testing, and deployment processes, ensuring efficient and reliable updates to the AR HUD navigation system.
- Optimization Expertise: Conducted comprehensive testing and optimization of the AR HUD navigation system to deliver responsive performance and a smooth user experience, even in challenging lighting conditions.
- Innovative Problem Solver: Demonstrated innovative problem-solving skills in addressing unique challenges associated with AR HUD development, resulting in optimized display and functionality.

Project Title : The Workshop : A Geodesign Simulation
Client : Arizona State University
Build platform : Unity 3D - WebGL, AR

The Geodesign project is an online experience intended to replicate an authentic geo-design workshop in which students assume the role of a stakeholder tasked with collaborating with other stakeholders to reach a design decision that will benefit all stakeholders and their constituents. I utilized multi-threading within C# to enhance performance and responsiveness, and implemented various data structures to efficiently manage and process the complex interactions and data involved in the workshop

Project Title : AcceL [Accelerated Learning]
Client : Internal Project [OneOrigin]
Build platform : Unity 3D - AR, VR and MR

In order to provide engineering students with fundamental learning experiences, the project aims to provide an immersive experience. There are multiple modes in the application that allow users to interact with 3D components, learn about the components, and study them in greater detail. Furthermore, there is an exploded view and a cross-sectional view included in the app

Project Title : TVS Production System
Client : TVS Motor Company
Build platform : Unity 3D - VR

This project aimed to transform the available contents of the TVS-PS Overview presentation into a Gamified Immersive Self-Learning program. The objective was to motivate learners to understand and complete the course with high scores in less time. Gamification was used to provide an engaging and enjoyable experience as learners navigated through the course. The concept involved an expedition to reach the summit of "Mount TVS-PS," integrating learning, quizzes, and game activities along the way. C# was utilized to develop interactive and dynamic elements of the program, while various data structures were employed to efficiently manage user progress, track quiz scores, and handle game logic, ensuring a seamless and responsive user experience throughout the learning journey.

Project Title : Animalia AR
Client : Own App
Build platform : Unity 3D - AR

A cutting-edge augmented reality app that revolutionizes wildlife interaction by allowing users to spawn and engage with lifelike animals in their surroundings. Implemented features for resizing, positioning, and capturing animal encounters, enhancing user engagement and educational value. Demonstrated expertise in AR technology and Unity development to create an immersive and captivating user experience.