

Bilal Ahmad

Sr. Unity 3D Developer

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[My Live Portfolio](#)

EXPERIENCE

Mind Solutions LLC, Remote — Sr. Unity Developer

Sep 2024 - Present

- Design and create engaging exercise games, combining event-related and entertainment elements to enhance user motivation and enjoyment.
- Develop games, 3D apps, Augmented Reality(AR), and Virtual Reality(VR) projects.
- Integrate different sensors for games like Kinect, lidar, game pads, controllers, etc
- Create Apps and games for events in the UAE.

VE2MAX, Remote — Sr. Unity Developer

Nov 2023 - Sep 2024

- Elevate the capabilities of Fittar Human Tracking, focusing on advancements in precision and performance.
- Successfully ported the Fittar App to IOS, expanding accessibility and user reach.
- Drive updates for the Asensei SDK, ensuring it remains at the forefront of technology and functionality.
- Spearheaded the development of innovative Exercise & Workout Apps, incorporating human tracking technology for a seamless and immersive fitness experience.
- Design and create engaging exercise games, combining fitness and entertainment elements to enhance user motivation and enjoyment.

Quantum Sols, Remote — Sr. Unity Developer & Team Lead

Dec 2022 - PRESENT

- Develop games, 3D apps, Augmented Reality(AR), and Virtual Reality(VR) projects.
- Spearheaded the integration of Unity with ChatGPT and other AI platforms to enhance user engagement and deliver immersive experiences.
- Collaborate closely with cross-functional teams, including AI researchers, software engineers, and designers, to identify opportunities for AI integration in Unity projects.
- Develop custom solutions and tools to facilitate the seamless integration of AI technologies, ensuring optimal performance and

SKILLS

Augmented Reality

Digital Twins-Meta Verse

MultiPlayer

Virtual Reality

Motion Sensors Integration

Events Based Games/Apps

ML in Unity

Prompt Engineering in Unity

3D, 2D & Hyper Casual Games

IOS & Android Apps

Publishing on stores

WebGL Publishing

Git

C#

Virtual Reality

Scrum/Agile/Jira

WordPress

Hosting services

Computer Maintenance

Leadership

Problem-Solving

Adaptability

Attention to Detail

Customer Service

Tools

Unity

Xcode

scalability.

- Implement AI algorithms, machine learning models, and natural language processing techniques to create interactive and intelligent virtual characters and environments.
- Design and implement intuitive user interfaces and systems for controlling and interacting with AI-powered elements within Unity.
- Collaborate with artists, animators, and sound designers to integrate AI-driven features into the visual and audio aspects of Unity projects.
- Conduct thorough testing, debugging, and optimisation of AI-integrated Unity projects to ensure high-quality performance across multiple platforms and devices.
- Stay updated with the latest advancements in Unity and AI technologies, evaluating their potential applications and incorporating them into ongoing projects.

Cloud Primerio, Remote — Sr. Unity Developer

July 2022 - April 2023

- Collaborated with app developers to enhance the user experience by adding 3D features to existing apps.
- Created immersive AR experiences and incorporated machine learning techniques to improve functionality and interactivity.
- Upgraded outdated games by implementing new features and fixing bugs, resulting in a better gaming experience for users.
- Demonstrated strong leadership skills by managing projects from start to finish, ensuring timely delivery of high-quality results in a dynamic work environment.

Alpha Kodez, Lahore, PK — Sr. Unity Developer & Team Lead

Nov 2019 - July 2022

- Oversaw and monitored team projects for timely and high-quality results.
- Provided support and guidance to junior team members.
- Published games on the App Store and Play Store, ensuring compliance with submission guidelines
- Developed new games and added features to existing games using Unity expertise
- Demonstrated self-motivation, personal responsibility, initiative, and creativity to tackle challenging tasks.

HighLogix, Lahore, PK — Mid-Sr. Unity Developer

Dec 2017 - Oct 2019

- Designed and developed Unity games and features to improve user experience
- Collaborated with the team to troubleshoot and resolve issues for a timely, high-quality result
- Utilised debugging techniques to optimise game performance
- Demonstrated strong project management skills, overseeing

Visual Studio

Blender

Figma

Photoshop

AWARDS

Unity Community Member in Sep 2022

Employee of the Year in Jan 2019

LANGUAGES

English - Professional

Urdu - Native

multiple projects for convenient, high-quality results.

Game Lead, Rawalpindi, PK — Intern-Jr. Unity Developer

July 2017 - Dec 2017

- Upgraded and published iOS games in compliance with submission guidelines
- Designed and developed games and added features using Unity and game development expertise
- Identified and resolved errors using debugging techniques to optimise game performance
- Improved gaming engines and tools to enhance productivity, creativity and innovation in game development.

EDUCATION

University of Engineering & Technology, Taxila — B.Sc Computer Engineering

Sep 2013 - July 2017

Majored in Computer Hardware, Software Development and Telecommunication.

- Created a Wireless patient monitoring System with an Android App(Temp, BP & ECG data collection, analysing data and sending warnings to doctors about their patients' health) for my final-year Project.
- Created websites, apps, games, networks, password cracking systems, Image processing projects, Vending machines using Arduino Uno, etc.

PROJECTS

1. **Fittar** — Worked on the Fittar workout app to improve human tracking and its movements.
2. **Digital Twins - Solar Power Plant** — Led a team in driving sustainability and efficiency through digital innovation by enhancing the future of industries with AR/ VR to experience added to Digital Twins.
3. **City Runner multiplayer & Kinect Sensor Game** — City Runner Multiplayer Game is an immersive event activity game developed in Unity by the Government of Abu Dhabi, UAE. The game offers an exciting and interactive experience, designed to engage players in a competitive, fast-paced environment. Leveraging Kinect technology for motion control, City Runner enables players to physically move left, right, and jump. This multiplayer game allows two players to compete simultaneously, aiming to score the highest points by navigating through a dynamic cityscape.
4. **Football Penalty using Kinect Sensor** — Created a football penalty game for a public event in F1 Race, Dubai.
5. **Virtual Reality Crane Simulator for Container Handling** — This immersive emulator is designed specifically for crane operators, offering a realistic and interactive environment to enhance their skills and precision in container handling. In this virtual environment, players step into the shoes of a crane operator as they enter the intricately detailed crane cabin. The player's task is to expertly

manoeuvre the crane to load containers from massive ships onto waiting trailers, replicating the challenges and responsibilities faced by real-life operators.

6. **Abra Boat Racing with Steering Controller** — Abra Boat Racing is an interactive event-based game developed in Unity, inspired by the traditional Abra boats of the UAE. This immersive racing experience combines the thrill of competition with cultural elements, offering visitors a chance to navigate waterways in a virtual environment. Players control their boats using a steering mechanism and an acceleration pedal, racing to achieve the best time. The game also features a local leaderboard, encouraging competitive gameplay among participants.
7. **Mosaic Wall with Photo Printing** — Mosaic Wall with Photo Printing is an engaging interactive project developed in Unity for the Borouge Dinner event in the UAE. This innovative experience allowed attendees to upload their photos via QR code scanning, have them printed instantly with a Borouge-branded frame, and see them displayed on a large screen as part of a dynamic mosaic wall. The project combined personalisation and advanced technology to create a memorable event highlight, showcasing Borouge's commitment to innovation and guest engagement.
8. **Human Nature Detection Application** — The Human Nature Detection Application was created for a large-scale public event in the UAE. It engages users through an interactive series of questions designed to detect their mood and reveal their personality traits. Built as a real-time analysis tool with an immersive visual reveal, the application offered each participant a unique, personalised experience.
9. **Scratch Me with Lidar Sensor** — Scratch Me with Lidar Sensor is an interactive installation developed in Unity, designed to engage attendees through a playful scratch-and-reveal experience. Installed at ground level, the project used a Lidar sensor to detect user movements across the surface. As users "scratched" the screen with their feet or hands, hidden messages were revealed, offering a dynamic and memorable interaction. The project seamlessly blended cutting-edge sensor technology with gamified interaction to captivate audiences and promote user engagement.
10. **Smoothie Power Challenge** — The Smoothie Power Challenge is a gamified cycling experience built in Unity and designed for wellness events. Participants pedal a stationary bike outfitted with Arduino-based sensors to power an on-screen avatar racing toward a finish line. Upon crossing the line, riders earn a smoothie gift, seamlessly blending physical activity with real-time game feedback.
11. **Trivia Games** — Event Game Hub – Abu Dhabi Edition is a vibrant interactive application developed in Unity, featuring three classic games: Who Wants to Be a Millionaire, Family Feud, and Wheel of Fortune. Specially designed for a major event in Abu Dhabi, this all-in-one entertainment hub offered guests an exciting, engaging, and competitive gaming experience. By recreating beloved TV game shows with customised branding and event-specific content, the app enhanced guest interaction and created unforgettable event moments.
12. **Tote Bag Customisation** — Created a Tote Bag Customisation Event Project in Unity for National Day events in the UAE.
13. **Date Harvesting using Kinect** — Created a Date Harvesting jumping game for National Day events in the UAE.
14. **This & That Quiz Game** — Created a Public Quiz game with 2 players in Arabic & English, having 2 modes for National Day events in the UAE.
15. **Fish Maze** — Created a Public fish maze game for National Day events in the UAE.
16. **Catch Me Up using Kinect Sensor** — Experience a groundbreaking fusion of technology and entertainment in this interactive gaming project. Developed using Unity and featuring the Xbox Kinect sensor, this game transforms human movement into dynamic gameplay. The objective is simple yet exhilarating - collect falling points, each with its own unique value, while avoiding negative points. The challenge lies in swiftly navigating your character, making this project perfect for exhibitions, events, and interactive installations.

17. **Fruit Frenzy – UniFruitti** — Fruit Frenzy is a vibrant match-3 puzzle game developed in Unity for Unifruitti, designed as an engaging activity for a public event in the UAE. Drawing inspiration from the popular Candy Crush game, Fruit Frenzy challenges players to match colourful fruits in rows or columns to score points and clear levels. The game offers an interactive and visually appealing experience, encouraging event visitors to test their strategy and puzzle-solving skills.
18. **Interactive Video Player for Industrialists Program** — The Interactive Video Player for Industrialists Program is an innovative solution developed for a prestigious event in the UAE, designed to enhance audience engagement and create memorable experiences. The system, created in Unity, integrates seamlessly with Arduino hardware to deliver an interactive feature for celebrating successful business deals. Each of the 70 tables in the event hall was equipped with a button that, when pressed, triggered a congratulatory message on the video screen, symbolising the closing of a deal.
19. **Reduce, Reuse, Recycle with Kinect Sensor** — Reduce, Reuse, Recycle is an educational and interactive waste awareness game developed in Unity for Bourge. Designed to promote sustainability, the game leverages Kinect motion sensor technology to engage players in an immersive activity that encourages proper waste segregation. Players use their physical movements to direct falling garbage into the correct recycling bins, combining fun and education in a unique way. The game also features a local leaderboard, adding a competitive edge to the experience. This game was showcased at an event in the UAE, inspiring participants to adopt environmentally friendly practices.
20. **Save The Ocean** — Save the Ocean is an action-based educational game developed in Unity, created to promote environmental awareness through engaging gameplay. In this interactive experience, trash items fall from the top of the screen, and users must quickly crush them to clean the ocean. At the same time, sea creatures swim in from the left and right sides, and players must avoid harming them. Combining fun mechanics with an important environmental message, Save the Ocean offered players an exciting challenge while encouraging positive action.
21. **Grand Gangster Real Crime City** — Created a GTA-themed game with shooting controls, Vehicle controls, AI Traffic, AI Humans and different missions.
22. **Legendary Stuntman Water Fun Run** — Created a fun run guy game with different hurdles on the way to the finish line.
23. **Commando Behind the Jail** — Created a commando escape game with different hiding and attacking controls.
24. **US Air Force Battle Helicopter** — Created a Helicopter rescue game with rope & lifter controls.
25. **Car Racing 3D Game: Car Games** — Created a street race theme game with AI racers' vehicles with different stunt-type missions.
26. **Dash Racer-Siren Head City Escape** — Created a horror escape game in a car with horror characters following the player on the main highway. The player has to shoot the horror characters and kill them before they kill the player.
27. **Cube Flux: The Ultimate Cube** — Created scenario based cube game with in-app purchases and bonuses/rewards.
28. **Knockout Stumble Run Fall Game** — Created stumble run game on the movable floor with different obstacles and opponents in the race.
29. **Football Dribble Game** — Created endless football dribbling games.
30. **Head The Ball** — Created an endless football head strike game.
31. **Football Penalty Game** — Created an endless football penalty game.
32. **Chef Cooking Game** — Created a chef cooking game with customers getting in queue for their order, these customers have facial expressions, ie happy, sad, angry, as per player progress. The chef can cook items like meat, sausages, and juices, and create burgers, sandwiches and ice cream.
33. **Save the car: offline games** — Added functionalities to dual control template, changed environment and UI.
34. **Horror Eye in Evil Window Game** — Designed and developed a scary escape game where the player picks up objects, unlocks things and breaks down doors to escape the horror-filled room.

35. Godzilla vs Monster Kong Fight — Created Godzilla vs Monster fighting game with different attack types depending upon the monsters.
36. Monster Gorilla City Attack 3D — Created a 3D monster game in Unity 3D where the player attacks the city, destroys vehicles, and kills enemies.
37. Angry Dino Zoo Hunter Gun Game — Created a forest theme dino shooting game.
38. Tank Battle: World War game — Created a Tank battle game with different scenario missions.
39. Zombie Supercar 3D Simulator — Created a hyper casual themed zombie shooter game with car upgradation checkpoints.
40. Excavator Game: Build Roads — Created a road construction game with excavator and other heavy machinery controls.
41. Dog Rescue Save Virtual Pet — Created a dog rescue game with dog controls and truck driving controls.
42. King Kong Game: Monster Quest — Created gorilla controls, which could kill the attacking dinosaurs and save the city.
43. Muscle Car Stunt Game: Car Sim — Created muscular and sports car stunt game.
44. Advance City Car Parking Game — Created an advanced car parking city game.
45. Killer Clown Game: Death Run — Created a horror escape game from the house with a clown searching for the player.
46. ZARCANE: A Zombie Apocalypse — Assisted a teammate on this project, helped him to create a zombie shooter game, implemented In-app purchases, implemented rewarded ads and chest system to the game and then published it to the Apple App Store.
47. Color Hide — Assisted a teammate on this project to publish it to the App Store.
48. Woodcraft Master — Assisted a teammate on this project to publish it to the App Store.
49. Princess Running to Home — upgraded this project from Unity 5.6 to Unity 2018, changed the environment and UI graphics
50. Plane Pilot Flight Simulator — Enhanced flight controls to an existing project, Added more levels.
51. Jet Sky Fighter Modern Combat — Created military sky jet shooter with a bazooka game.
52. Battle of Tanks Vs Warplanes — Created a military anti aircraft tank game to shoot down enemy warplanes..
53. Fighter Helicopter Gunship Bat — Created army anti helicopter attack game.
54. Ultimate Missile War WW2- Miss — Created a locking missile system game to attack the enemies' warplanes.
55. Grand Tank VS Futuristic War — Created tank vs attacking robot game.
56. Battle of Tanks - World War — Created player vs enemy tank game.
57. Tractor Pull Premier League — Created tractor back to back pull game with realistic sounds and controls.
58. Snow Heavy Excavator Loader Sim — Created snow excavator game.
59. Mega Snow Excavator Machine Sim — Created excavator snow landsliding rescue game with realistic animations.
60. Grand Snow Clean Road Driving — Created an excavator game to clean the roads in the snowy weather.
61. Powerful Mega Excavator Sim — Created excavator simulation game with realistic excavator controls.
62. Snow Cutter Excavator Sim — Created snow cutter game.
63. Heavy ForkLift Simulator Park — Created a forklift game to transport goods from one place to another.
64. Poultry Farming game - Transport — Created poultry farm transportation simulation game.
65. US Horse Racing Transport Truck — Created horse truck transport game on heavy vehicles.
66. Dog Transport Truck Driver — Created a dog transportation game with dog controls and truck & trailer controls.
67. Army Ambulance Driving Rescue — Created army ambulance rescue game.

68. SAS Military Commando Course — Created army commando training game.
69. Miami Vendetta Crime Sim 3D — Created a karate theme game for street fights.
70. Grand Street Thug Crime — Created a karate theme game for street fights.
71. IGI Rambo Jungle Prison Escape — Created commando escape game with different hiding and attacking controls.
72. Counter Terrorist Attack Action — Created a counter terrorist game with shooting controls.

RESEARCH PROJECTS

1. Human Detection (Research) — Utilised my expertise in Unity game development and AR to develop and implement Human Detection using AR Foundation in Unity. This project involved implementing machine learning techniques for real-time human detection, showcasing my proficiency in computer vision, image processing, and AR technologies.
2. Object Detection (Research)— Developed and implemented Object Detection API using Yolov3 and Flash to detect objects and improve performance in various applications. Utilised Tensorflow 2.0 API and Detections to create models for human detection, resulting in improved accuracy and efficiency.
3. Open AI/ prompt engineering in Unity (Research)— Integrated a basic level chat prompt using OpenAI/ChatGPT in Unity.

All other references would be delivered on demand.