### **Omid Saadat**

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Senior Technical Artist with 17+ years of experience driving technical excellence and team development across AAA and mobile game production. Proven track record of taking ownership in leadership roles, mentoring teams, establishing pipelines for 50+ developers, and delivering complex technical solutions that save production time.

#### **Technical Expertise:**

#### **Core Technical Arts:**

- Shader Programming: Node-based (Shader Graph, Amplify) and Code-based (HLSL, GLSL)
- Tool Development: Stand-alone applications, Editor Extensions, and In-Game Tools
- Procedural Generation: Textures, Meshes, Levels, and Content Automation
- VFX & Simulation: Particle Systems, Physics Simulation, and Visual Effects
- Performance Optimization: Profiling, Asset Optimization, and Runtime Performance

#### Technical Leadership:

- Pipeline Architecture: DCC-to-Engine workflows, Asset Management, and Build Automation
- Game Architecture & Design Patterns: MVC, ECS, DDD, and Scalable Code Frameworks
- Automated Build Pipelines & CI/CD: Github Actions, GitLab Runner, Jenkins, and Deployment Systems
- Cross-Platform Development: Unity3D, Unreal Engine, Godot and In-house Engines

### **Leadership Impact & Key Achievements:**

- Stepped into Leadership: Took full responsibility for all technical art disciplines during lead absence at Ubisoft
- **Team Development**: Trained and mentored technical artists, conducted teams of 20+ developers and artists
- **Process Innovation**: Designed pipelines saving up to 99.96% of artist time by developing tools to handle a 1 day task in 10 seconds
- **Standards Establishment**: Created comprehensive art pipeline documentation for 50+ team members
- Cross-Studio Coordination: Facilitated communication between multiple studios in codevelopment environment
- Technical Ownership: Led FarCry franchise vehicle pipeline architecture and implementation
- **Knowledge Transfer**: Prepared educational materials and trained teams on new technologies and workflows

### **Experience:**

# Senior Technical Artist at Ubisoft Blue Byte [01-2024 - Present][Dusseldorf/Germany]

• Assumed technical leadership for all technical art disciplines during initial technical audit and continued ownership thereafter

- **Architected and delivered** DCC-to-engine pipeline for vehicle assets in the FarCry franchise, featuring:
  - DCC-independent workflow enabling artists to use various DCC tools (e.g., Blender, 3dsMax, Maya) seamlessly.
  - Encapsulated team-specific scopes, allowing the modeling team to adjust visuals without impacting animation integrity.
  - Support for rigging and animating unskinned models to optimize performance.
  - Out-of-the-box data delivery for real-time ray tracing.
- Effective development of automated tools to:
  - Generate required model hierarchies based on asset metadata.
  - $\circ$  Create dynamic collision meshes and material collisions from the model.
  - Split and merge model parts by material ID.
  - Simulate vehicle damage variants.
  - Bake deformation data into vertex colors for runtime damage visualization based on hit positions passed to the shader.
- **Designed and implemented** graph-setup tool saving artist time while ensuring team consistency by handling a 1 day task in 10 seconds.
- **Drove cross-studio collaboration** and communication between multiple teams in codevelopment environment
- Led performance optimization initiatives through profiling and strategic planning
- Mentored and trained technical artist to take ownership of vehicle shader systems

# Freelance Technical Artist at Gameloft Toronto [07-2022 - 04-2023][Istanbul/Turkey]

- Optimized art pipeline for increased development speed supporting both legacy in-house engine and Unity
- Profiled and optimized game performance for mobile devices using Unity Profiler
- Developed tools for artists and designers to improve workflow and reduce human error
- **Prepared educational materials** on technical requirements for different teams, such as Git for artists

# Lead Programmer and Technical Artist at LeMoonade [10-2021 - 07-2022] [Istanbul/Turkey]

- **Provided technical solutions**, technology, shaders, tools, and pipeline for a blockchain-based game
- Created a fully interactive 3D static website using Unity for CryptoRoomZ Project to introduce the product, showcase the work, and show off technical capabilities
- Developed a dedicated task execution system for executing website interactive object behaviors

#### Technical Artist At Cafe Bazaar [09-2020 – 07-2021][Karaj/Iran]

- **Provided technical solutions**, technology, shaders, tools, and pipeline to four different F2P mobile game titles
- Developed an optimized and easy-to-use camera system for game designers in a racing game
- Wrote an editor tool called OpenJuice for developers and designers to juice up two games
- Prepared comprehensive documentation containing standards for 2D and 3D art pipelines for 30+ people
- Conducted two teams of 10+ developers and artists to optimize assets and codes
- Analyzed and optimized projects to satisfy art and performance needs and keep the balance between beautiful and fast

# Lead Game Programmer At Arsam Robotics [01-2020 – 12-2021][Part-Time] [Karaj/Iran]

- Provided technology, tools, and pipeline for a physical/digital toy with four digital games
- Provided solutions in challenging situations based on deadlines, budget, and human resources
- Formed a team of 2 other developers to have an optimized pipeline, delivering data from android native image processing library to Unity
- Coded an API in Unity to map Android native image processing data into in-game events and data

#### Gameplay Programmer At Garaj Games [10-2019 – 10-2020] [Tehran/Iran]

- Implemented core gameplay mechanics in Unity using C# for a Match3 game
- Built an editor tool in Unity for game designers to make 10+ levels per day
- Developed a bot in Unity to play levels and measure their difficulty and playability

### Freelance Game Programmer At Cultural Infusion [07-2018 – 09-2019][Karaj/Iran]

- **Structured DDD** (Data Driven Design) architectures for fast, responsive music-based games in Unity
- Effectively implemented procedural workflows to convert designed levels into JSON format and read them in Unity to increase development speed
- Worked closely with other teams, including game design, art, back-end, and test, to consider game performance, stability, and maintainability

#### Iran Game Development Institute [10-2017 – 10-2018][Part-Time][Tehran/Iran]

- Taught Unity game engine to beginner-level students
- Taught the best architectures and features to use with the Unity game engine in advanced game development courses to intermediate students

#### Game Programmer At Pooyegaam [08-2017 – 07-2018][Tehran/Iran]

- Technically managed development process in a highly challenging online pet game, reporting and presenting regular progress to the CEO to ensure the project is on the right path
- Coded a framework with dependency injection in Unity for an extendable and maintainable game
- Worked closely with game development and marketing teams to make sure the development process met final product requirements

# Senior Game Programmer At Electro Gryphon Games [09-2015 – 08-2017] [Tehran/Iran]

- Built game prototypes and technical demos to be able to feel raw ideas
- **Built editor tools** for game designers and artists to validate their designed levels and produced assets
- **Programmed gameplay** and maintained code-base using Unity and C# for a top-down shooter game for mobile platforms

# Game Programmer And Tool Developer At Bitbyterz [01-2014 – 09-2015] [Tehran/Iran]

• Wrote gameplay, UI, and editor tools for game designers and artists for Memoranda (A point-Click adventure game based on Murakami novels)

# Game Programmer And 3D Generalist At Shexel [03-2012 – 01-2015][Part-Time][Tehran/Iran]

- Created complex 3D models using 3D Studio Max, Maya, Blender, and Zbrush, UV(Unwrapping), Textured using Photoshop and Gimp, and rendered game cinematics and animations using VRay, MentalRay, and Lumion
- Designed, made prototypes, and wrote three games and two mobile applications using GameMaker Studio

# Senior Character/Environment Artist At Fsr Company [09-2007 – 10-2013] [Karaj/Iran]

- Modeled 3D environment and characters, Unwrap, and texture
- Mentored 3D animator to achieve usable character rigs and animations in-game
- Created max scripts tools to automatically bake lighting in five levels and export them from 3dsMax into Leadwerks game engine

#### **Education:**

Karaj Islamic Azad University (KIAU), 2006-2010 - Bachelor of Engineering, Computer Graphics

### **Awards & Recognition:**

- Industry Mentor at ADPList platform adplist.org/mentors/omid-saadat
- Best Game Award for SATYAR: RETURN TO PARSEH on 2nd Broadcast Engineering Conference, 2007

#### Interests:

- Video games: Journey, Engareh, Devil may cry 3, The Neverhood, Kingdom Rush, Plant vs. Zombies, HomeScapes!
- Anime: One Piece, Naruto, Black Clover