

# POOYA EIMANDAR



## CONTACT

-  +98 - 912 - 527 26 33
-  [Pooya@BaziPardaz.onMicrosoft.com](mailto:Pooya@BaziPardaz.onMicrosoft.com)
-  [PooyaEimandar.github.io](https://PooyaEimandar.github.io)
-  Pooya Eimandar
-  [linkedin.com/in/pooyaeimandar](https://linkedin.com/in/pooyaeimandar)

## REFERENCES

Mohammad Hossein Rezvani, PhD

The Head of University of Applied Science  
and Technology National Foundation of  
Computer Games Branch

<https://sites.google.com/site/mohammadhosseinrezvani/home>

last modified: 13.08.2020

## SUMMARY

*Founder and lead developer at [WolfEngine.app](#), member of [Microsoft Partner Network](#) and author of the book "[DirectX 11.1 Game Programming](#)" published by PackT.*

*I graduated in computer science and hardware engineering degree from Shomal university and I'm one of the technical reviewers of the book "[Game Programming Using Qt: Beginner's Guide](#)".*

*Since 2010 until 2014, I was founder and senior lead developer of [Persian Game](#)*

*[Engine](#) at <https://vimeo.com/channels/bazipardaz>.*

*Since 2014, I founded Wolf Engine and I've been working on projects of Wolf Engine organization.*

*I was Lead Developer and Project Manager of Project Falcon, a real time, 3d simulator and monitoring system for ERP at FANAP.CO. and currently I'm leader Co-Founder and leader at [play.pod](#) (The first cloud gaming & streaming platform in Middle East) which is developed based on Wolf.*

# EXPERIENCES

2016 – Present **CTO and Project Manager**

## Fanap.ir

Projects:

**Falcon:** A true real time 3D simulator and monitoring system for ERP is the next generation of monitoring systems.  
([https://youtu.be/ygpz35ddZ\\_4](https://youtu.be/ygpz35ddZ_4))

- **PlayPod:** I'm the Co-Founder and Leader at PlayPod, the first cloud gaming platform in Middle East. I developed a cloud based real-time game streaming platform in order to play PC games anywhere on any platform over internet. This is a cloud gaming platform for eSports, developed based on Wolf Engine. In fact, Play Pod is similar to Google Stadia or Microsoft XCloud projects, yet it was developed and launched almost a year prior to these big projects. It provides leader boarding, multiplayer and matchmaking solutions. Plus, the game could be broadcasted for any user who wishes to.  
(<https://youtu.be/ZUEQY2TGp3w>)  
<https://playpod.ir/>

2016 – Present **Founder and Lead Developer**

## WolfEngine.App

Wolf Engine is passionate about 3D Graphics Technology. It is an in-house studio, working on games, game engine, 3D tools, backend services and TV broadcasting tools.

Projects:

- **Wolf.Engine:** This is the next generation of [Persian Game Engine](#), a cross-platform open source game engine. Wolf Engine is written in C++ and supports Python and Lua as an embedded script language. This is a set of C++ open source libraries for real time rendering, real time streaming and game developing.  
(<https://github.com/WolfEngine/Wolf.Engine>)

- **Wolf.PlayOut:** This is the TV broadcast playout automation software that is currently used by AlAlam News Network TV and optimized based MOS protocol. The Playout developed based my in-house open source game engine called "Wolf Engine" and is switchable between SD/HD/2K and 4K broadcasting formats. (<https://www.youtube.com/watch?v=EZSdEjBvuGY>)
- **Wolf.CG:** Plays simultaneous layers of dynamic graphics includes videos and images in real-time 3D/2D view for all broadcast. Wolf.CG supports inputs and outputs of both SD and HD to HD-SDI, HDMI and/or computer screens with key/alpha, including SDI-embedded audio. High-performance with asynchronous and multi-threaded I/O and paired with GPU-accelerated real-time rendering.
- **Falcon:** A true real time 3D simulator and monitoring system based on Wolf Engine and developed for Fanap holding's ERP and which is the next generation of monitoring systems. ([https://youtu.be/ygpz35ddZ\\_4](https://youtu.be/ygpz35ddZ_4))
- **PlayPod:** launched as the first Cloud Gaming and Streaming platform in Middle East in 2019 and with greatest pride, PlayPod is standing shoulder to shoulder with the big names in game industry; after Nvidia GeforceNow, Sony Playstation Now and before Microsoft XCloud and Google Stadia. PlayPod is achieved based on WolfEngine. (<https://youtu.be/14KRyURyszI>)

**2014 – Present Senior GPU programmer, software developer and project advisor**

### **Alalam News Network channel TV**

Generating new development tools for real time Playout & CG editor based on MOS protocol. Implemented with ffmpeg & pure DirectX 11.1 on windows 8\ 8.1\ 10 that can be used on Windows 7(with platform update), also integrated with Decklink cards for real time capturing, cg editing and playbaking HD/SD medias. (Tested on Blackmagic Design DeckLink 4K Extreme card).

The graphical core of this application was achieved based on my next in-house game engine, named Wolf Engine.

**2014 – Present Member of IGDF jury panel for the best  
Computer games technology  
IGDF.ir.**

<http://igdf.ir/>

**2014 – 2015 Lecturer**

**Iran Game Development Institute**

Teaching courses such as C++, OpenGL ES and DirectX Programming, at Iran Game Development Institute.

[www.irangdi.ir](http://www.irangdi.ir)

**2013 – 2015 Lecturer**

**The University of Applied Science and  
Technology National Foundation of Computer  
Games**

Teaching courses such as C++, C#, GPU Programming, at the University of The University of Applied Science and Technology National Foundation of Computer Games.

**2012 – 2019 Microsoft Partner**

**Microsoft Partner Network**

Member of Microsoft Partner Network.

<https://social.msdn.microsoft.com/profile/pooya%20eimandar>

**2011 – 2013 Project supervisor and adviser**

**Eirib.ir**

Project supervisor and adviser at the department of IPTV game.

**2010 – 2015 Founder and CEO**

### **BaziPardaz**

Founder, CEO at BaziPardaz. BaziPardaz Persian Tav is a knowledge-based company Ltd with the focus on simulators and gpu based real time applications.

Also working as lead programmer of Persian Game Engine. The Persian Engine is a 3D game engine achieved by directX 9 and it was the core of projects of BaziPardaz. BaziPardaz published many projects during 2010-2015, including but not limited to:

- An open source Game Engine on <http://persianengine.codeplex.com> . Persian Engine was ranked second in the best technology of computer games of International Digital Media Festival & Fair 2011-2012.
- The third person shooter PC game named The Land (<https://vimeo.com/106925703>)
- An online virtual 3d city named City2. (<https://vimeo.com/80917932>)
- An interactive Kinect PC game named Master Chef. (<https://vimeo.com/93597108>)
- A pipeline framework for Facial Animation between Persian Engine and Autodesk Softimage/Motion Builder (<https://vimeo.com/79210871>) (<https://vimeo.com/83172048>)
- An editor for Persian Engine (<https://vimeo.com/79195038>)

Channel of BaziPardaz on Vimeo: <https://vimeo.com/channels/bazipardaz>

**2009 – 2010 Senior Silverlight Developer**

### **Safa Rayaneh Co.LTD.**

Developed an online CAD collaboration same as Autodesk Butterfly with XNA and Silverlight 5.

**2008 – 2009 Senior DirectX Developer**

### **Rasapardaz Co LTD.**

Developing GUI of simulators with DirectX 9.

# PUBLICATIONS

March 6, 2018 **The next generation of GPU APIs for Game Engines**

Demonstrate about new pipeline of GPU APIs for developing real time game engine.

SlideShare:

<https://www.slideshare.net/PooyaEimandar/the-next-generation-of-gpu-apis-for-game-engines-89840846>

YouTube:

[https://www.youtube.com/watch?v=w34s29HZ\\_5o&t=17s](https://www.youtube.com/watch?v=w34s29HZ_5o&t=17s)

Jan 1, 2016 **Game Programming Using Qt: Beginner's Guide**  
**Packt Publishing**

I was one of the technical reviewers of the book "Game Programming Using Qt: Beginner's Guide" by Witold Wysota and Lorenz Haas.

<https://www.packtpub.com/game-development/game-programming-using-qt>

**Jan 30, 2014 Learning Modern C++ for Game Programmers**

This is a free open source project devoted to teaching how to program in Modern C++, regardless of any prior experience in programming. This studying project is hosted for self-studying modern C++ besides game programming.

<http://learningmoderncpp.codeplex.com/>

**Jan 27, 2014 the use of motion sensors in medical and health industry**

**Conference of Game & Medical Health**

Author of an article, titled “The use of motion sensors in medical and health industry” for the first conference of Game & Medical Health.

<http://www.slideshare.net/PooyaEimandar/ss-38769072>

**Oct 11, 2013 DirectX Graphics Diagnostic**

**GameDev.net**

An article about GPU graphics diagnostic on <http://www.GameDev.net> debugging a captured frame is usually a real challenge in comparison with debugging C++ code. We are dealing with hundreds of thousands of more, pixels that are produced, and in addition, there might be several functions being processed by the GPU. Typically, in modern games, there are different passes on a frame constructing it; also, there are many post-process renderings that will be applied on the final result to increase the quality of the frame. All these processes make it quite difficult to find why a specific pixel is drawn with an unexpected color during debugging.

[http://www.gamedev.net/page/resources/\\_/technical/directx-and-xna/directx-graphics-diagnostic-r3380](http://www.gamedev.net/page/resources/_/technical/directx-and-xna/directx-graphics-diagnostic-r3380)

Aug 17, 2013 **the book "DirectX 11.1 Game Programming"**

**Packt Publishing**

DirectX 11 is packed with features to meet the demands of modern gamers, multi-core processors, and the latest Microsoft operating systems. This book gives you access to all that with an example-led, user-friendly approach.

<https://www.packtpub.com/game-development/directx-111-game-programming>

## EDUCATION

2004, 2008 **Bachelor computer science**

**Shomal University**

<http://www.shomal.ac.ir/en/>

## LANGUAGES

- English: Full professional proficiency
- Persian: Native

## PREFERRED PROGRAMING LANGUAGES

- Assembly
- C/C++/D
- HLSL/GLSL
- Rust
- Go
- Python/Lua
- C#



## **PREFERRED APIS**

- Vulkan
- DirectX
- Metal
- OpenGL
- OpenCL
- WebGL
- Web Assembly

## **PREFERRED TECHNOLOGIES**

- Cloud gaming
- Cloud computing
- Realtime rendering
- Realtime computing
- Micro Services
- AI

## **INTERESTS**

- Game developing
- New technology
- GPU rendering/programming
- Swimming
- Water Polo