

Mohammad Mehdi Afkhami Aqda

Yazd – Iran

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Summary

Passionate and skilled gameplay programmer with a strong foundation in Unity and Godot game engines, coupled with a solid understanding of 3D game development. Demonstrated ability to work effectively both independently and collaboratively. As a member of a small team of two, I played a key role in the development of a 3D space shooter game, demonstrating exceptional problem-solving, collaboration, and communication skills. Possesses expertise in teaching and research.

Skills

Programming Languages: C#, C++, Python, Java, **Art & Game Development:** Unity, Godot, Blender, SQL, CSS, Krita

Frameworks & Libraries: .NET, OpenGL, Numpy, **Software Engineering:** Refactoring, Debugging, Unit Testing, Agile Methodology, Design patterns, Pandas, Matplotlib, TensorFlow, networkX, SOLID

Tools: Git, Jupyter Notebook, \LaTeX , Markdown, **Soft Skills:** Team Work, Collaboration, Teaching, Linux, Obsidian, MS Office, Research, Problem Solving

Education

Vali-e-Asr University of Rafsanjan

Rafsanjan, Iran

B.Sc. Computer Engineering

2018–2023

○ CGPA: 16.26/20, 142 credits

○ Major Area: Software Engineering.

○ Thesis: Solving community detection problem using evolutionary algorithm in social networks

○ Thesis grade: 20/20

Generative Deep Learning with TensorFlow

Coursera

Certificate

2023

○ Education provider : DeepLearning.AI

○ Skills : Deep Learning, Generative AI, TensorFlow

○ Credential ID : JDQKWCDQADSV ↗

Publications

○ Iman Hemati Moghadam, **Mohammad Mehdi Afkhami**, Parsa Kamalipour, Vadim Zaytsev, "Extending Refactoring Detection to Kotlin: A Dataset and Comparative Study" (*accepted*)

○ Fahimeh Dabaghi-Zarandi, **Mohammad Mehdi Afkhami**, Mohammad Hosein Ashoori, "Solving community detection problem using evolutionary algorithm in social networks" (*submitted*)

Experience

Research

Remote

Department of Computer Engineering, University of Twente

Aug 2023–Present

○ Supervisor: Dr. Iman Hemati Moghadam

○ Field: Software Refactoring

○ My responsibilities include: Programming, Testing the Tool, Refactoring validation.

Rafsanjan, Iran
Apr 2022–Jan 2023

Department of Computer Engineering, Vali-e-Asr University of Rafsanjan

○ Supervisor: Dr. Fahimeh Dabaghi-Zarandi

○ Field: Community Detection

○ My responsibilities include: Gathering information, Reading papers, Programming, Testing the solution, Writing first draft of the paper.

Teaching

Undergraduate Teaching Assistant

Rafsanjan, Iran
Mar 2021–Jan 2023

CE Department, Vali-e-Asr University of Rafsanjan

Artificial Intelligence

Dr. Amir Hossein Hadjahmadi

Fall 2022

Design and Analysis of Algorithms

Dr. Fahimeh Dabaghi-Zarandi

Spring 2022, Fall 2021, Spring 2021

Data Structures

Dr. Fahimeh Dabaghi-Zarandi

Spring 2022, Fall 2021, Spring 2021

Discrete Mathematics

Dr. Fahimeh Dabaghi-Zarandi

Fall 2021, Spring 2022

Operating Systems

Dr. Fahimeh Dabaghi-Zarandi

Spring 2022

Instructor for The Summer Coding Bootcamp

Vali-e-Asr University Scientific Association of Computer Engineering

Summer 2022

Teaching game development & software architecture using Unity3D & Blender

Others

Team Co-Founder & Game Developer

Null References [↗](#), Indie Game Development Team

Feb 2020–Present

Selected Projects

Uncertainty [↗](#)

An action-adventure space-shooter game

Feb 2021–Sep 2022

We utilized software architecture principles such as design patterns and agile methodologies to overcome challenges which included management of artistic and programming aspects of the game. At the moment, the game is abandoned

OpenGL Game [↗](#)

A 3D game made using OpenGL

Spring 2020

Developed skills in writing C++ code for OpenGL and its shading language, as well as knowledge of 3D object formats

Automata Simulator [↗](#)

Simulator that supports DFA, DPDA, and Turing machines, for educational purposes

Spring 2020

The logic was implemented using an observer pattern and the user interface was based on simple bezier curves

Symmetry [↗](#)

A puzzle game made using Unity

Spring 2020

game was designed to test our short-term memory for visual information

Quine McCluskey [↗](#)

Implementation of:

Spring 2019

the Quine McCluskey minimization method for boolean functions, windows presentation form was used for user interface

★ [Click here to see more projects](#) [↗](#)

Test Scores

TOEFL: 88

Selected Relevant Coursework

Computer Graphics: 20/20

Advance Programming: 20/20

Discrete Mathematics: 18.36/20

★ [Click here to see more](#) ↗

Data Structure: 19.67/20

Artificial Intelligence: 20/20

Software Engineering: 18/20

Extra Curricular Activities

Member of Teaching Assistant Committee

Vali-e-Asr University Scientific Association of Computer Engineering

Jul 2022–Jun 2023

Vali-e-Asr University of Rafsanjan

President of Executive Staff

Video Games Association

Oct 2020–Jun 2021

Vali-e-Asr University of Rafsanjan

Member Of Scientific Committee

Computer Engineering Scientific Association

May 2019–Jun 2021

Vali-e-Asr University of Rafsanjan

Languages

Persian: Native language

English: Fluent