#### Personal

• E-mails: sajadimousa@gmail.com

• Cell Phone: +989129339688

• Military service status: Iran, finished at army military police

• Linkedin: <u>Seyed Mousa Sajadi</u>

Github: <u>YasharSajadi</u>Youtube: <u>YasharSajadi</u>Website: <u>YasharSajadi</u>





## **Highlight of Skills**

- +9 years of experience in fast-paced, client- and quality-focused atmosphere in programming.
- Designing and solving simulation in porous media.
- Creating model and simulation physical phenomena as numerical and analytical solution.
- Implementing image processing and analyzing multi-dimension images.
- Programming and optimization problems with artificial intelligence, machine learning, and system control.

#### Education

## M.Sc. Petroleum Engineering – Hydrocarbon Reservoir

Islamic Azad University, Science and Research Branch, Department of Petroleum Engineering (Sep 2016 - Sep 2020) |

**GPA:** <u>17.45</u> out of 20

Thesis Title: Surfactant injection simulation in porous medium and investigation on surfactant concentration in residual oil remained in isolated pores

Supervisor: Dr. Saeid Jamshidi (Associate Professor)

### **B.Sc.** Petroleum Engineering – Exploration Engineering

Islamic Azad University, Science and Research Branch, Department of Petroleum Engineering (Sep 2013 – Sep 2016)

**GPA:** <u>16.17</u> out of 20

Thesis Title: Sedimentary environments and oil shale formation beds

**Supervisor:** Dr. Seyed Mohsen Aleali (Assistant Professor)

## **Publications**

- 1- Shafiabadi, M., Kamkar-Rouhani, A. & **Sajadi, S.M.**, Identification of the fractures of carbonate reservoirs and determination of their dips from FMI image logs using Hough transform algorithm. *Oil Gas Sci. Technol. Rev. IFP Energies Nouvelles*, 76 (2021) 37. (here)
- 2- **Sajadi, S.M.**, Jamshidi, S. & Kamalipoor, M. Simulation of two-phase flow by injecting water and surfactant into porous media containing oil and investigation of trapped oil areas. *J Petrol Explor Prod Technol* 11, 1353–1362 (2021). (here)
- 3- Sanei M., Shafiabadi M., Hekmatnejad A.& **Sajadi S.M.**, Presentation of representative shape parameters of porous media based on mathematical computation on images. (Submission in Acta Geotechnica)
- 4- New software to determine the characteristics of a shape and create a 2D random porous media using similar shapes (RPMG2D-software). (In Progress)
- 5- A new software to determine complex fractures in FMI logs using Radon and Hough transform to detection and using graph theory to determine their complexity relationship. (In Progress)

## **Technical and Software Skills**

**Programming language:** 

**Computer skills & software:** Common: MSOffice, and VB(Macros), GWA (Sheets, Docs, Sliders, Forms).

OS language: Batch, PowerShell, Bash. IDE: Visual Studio Code (VSCode) and VS.

Engineering software: Monster: Eclipse (Schlumberger), COMSOL Multiphysics.

Familiar: Petrel & Techlog (Schlumberger), CMG (Computer

Modelling Group), F.A.S.T. (Fekete), Ecrin (Saphir, Topaze, Diamant), Emeraude, PDSView, Geolog(Paradigm), PanSystem, ArcGIS, Surfer. **Monster**: MATLAB, GNU Octave, Python, JavaScript, C#(+WPF), and

Maple.

**Understanding syntax:** Ruby, Julia, Dart (Flutter), C++, Objective-C,

Swift, Java, Kotlin, Scala, Rust, Solidity.

Other extension files: Interactive Python Notebook (.ipynb), .dxf, .json, .bin, .raw, .exe, Pine

Script.

**3D software:** Rhinoceros (+Grasshopper), ParaView.

## **Programming Experience & Software**

• Implementation of <u>shape analysis</u> algorithms (<u>RPMG2D</u>).

- <u>Couple Eclipse</u> software with other programming languages.
- Creating software with Python (KuCoin-API-Machine).
- Some tricks in working with Python.
- Importing 2D and 3D models in COMSOL.
- Creating a Python package(pip) to transfer data and programs without special access (Rentry-Lab).
- Building software based on GNU Octave to separate grains in images (Grain-Selector).
- Create software to analyze shapes and create random porous media (RPMG2D).

# **Relevant Work Experience**

### **Developer Engineer**

- **R&D** AcidPro© (MAPSA, Tehran, Iran | July 2023 Present)
- **R&D Pore Studio**© (Tehran, Iran | June 2021 June 2022)
- Chairman of the Board in Irsa Modern Espad Co. (Tehran, Iran | Nov 2017 April 2021)
- Pipe Line Supervisor in Exir Novin Farayand Asia Co. (Tehran, Iran | Aug 2013 Mar 2014)

# **Training**

- Training MATLAB Course in Youtube (40 hours | Dec 2022)
- Training MATLAB Course in DabirBartar (30 hours | July 2019)
- Training MATLAB Course in Irsa Modern Espad Co. (30 hours | Nov 2018)

# Workshops & Courses

- Certification of OOPs in Python online course (2023)
- Certification of Projects in JavaScript online course (2023)
- Certification of Onramp MATLAB online course (2018)

- Certification Simulation of Hydrocarbon Reservoir in <u>Eclipse</u> (2017)
  Attended a workshop at "Negareh Institute".
- Certification of <u>PVTi</u> Workshop (2017)
  Attended a workshop at "Islamic Azad University, Science and Research Branch".

# Language

• English (IELTS Candidate/General)

• Persian (Native)

### Reference

Prof. Saeid Jamshidi Associate Professor at the Sharif University of Technology,

Chairman of Department of Chemical and Petroleum Engineering,

Tehran, Iran

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Prof. Majid Bagheri Associate Professor at the University of Tehran,

Head of Exploration Seismology Research Section Institute of Geophysics

Tehran, Iran

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Prof. Arash Ebrahim Abadi Associate Professor at the Islamic Azad University Qaemshahr Branch,

Department of Mining and Geology,

Qaemshahr, Iran

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