## Personal

- E-mails: sajadimousa@gmail.com
- Cell Phone: +989129339688
- Military service status: Iran, finished at army military police
- Linkedin: Seyed Mousa Sajadi
- Github: YasharSajadi
- Youtube: YasharSajadi
- Website: YasharSajadi

## 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:** 17.45 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:** 16.17 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

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|---|---|
| **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. |
| **Programming language:** | **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 shape analysis algorithms (RPMG2D).
- Couple Eclipse 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 PoreStudio**© (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 Eclipse (2017)
  Attended a workshop at "Negareh Institute".
- Certification of PVTi Workshop (2017)
  Attended a workshop at " Islamic Azad University, Science and Research Branch ".

## Language

- English (IELTS Candidate/General)
- Persian (Native)

## Reference

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|---|---|
| Prof. Saeid Jamshidi | Associate Professor at the Sharif University of Technology, Chairman of Department of Chemical and Petroleum Engineering, Tehran, Iran  jamshidi@sharif.edu |
| Prof. Majid Bagheri | Associate Professor at the University of Tehran, Head of Exploration Seismology Research Section Institute of Geophysics Tehran, Iran  majidbagheri@ut.ac.ir |
| Prof. Arash Ebrahim Abadi | Associate Professor at the Islamic Azad University Qaemshahr Branch, Department of Mining and Geology, Qaemshahr, Iran  mabadi@Qaemiau.ac.ir |