
Personal

- Name: Seyed Mousa
- Last: Sajadi
- Date of Birth: 18/01/1990
- Gender: Male
- Military service status: Iran, finished at army military police
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Education

M.Sc.

Islamic Azad University, Science and Research Branch, Department of Petroleum Engineering (Hydrocarbon Reservoirs)

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.

Islamic Azad University, Science and Research Branch, Department of Petroleum Engineering (Exploration Engineering)

GPA: [16.17](#) out of 20

Supervisor: Dr. Seyed Mohsen Aleali(Assistant Professor)

Research Interests

- Programming (I am interested in solving complex problems and creating algorithms for their programming).
- Porous Media (Interest in designing and solving simulation related problems).
- Numerical solution of physical problems (Learning and simulating physical phenomena).
- Image Processing (Analyzing Multi-Dimension images and characterizing them is one of my interests).
- Modeling & Simulation (In general, I am interested in creating a general model of problems and solving and predicting them).

Publications

- 1- Identification of the fractures of carbonate reservoirs and determination of their dips from FMI image logs using Hough transform algorithm. ([here](#))
- 2- Simulation of two-phase flow by injecting water and surfactant into porous media containing oil and investigation of trapped oil areas. ([here](#))
- 3- New software to determine the characteristics of a shape and create a 2D random porous media using similar shapes (RPMG2D-software). (is writing)
- 4- 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. (is writing)

Technical and Software Skills

Computer skills & software:	Msoffice (+VB and Macros), GWA (Sheets, Docs, Sliders, Forms). OS Command: Batch, Bash, PS. IDE: Visual Studio Code (VSCode).
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, Batch, Bash, Powershell, Maple. Understanding syntax: C#, Ruby, C++, C-Object, Java, Kotlin, Scala, Rust, Solidity, Dart and Flutter.
Other extension files:	Interactive Python Notebook (.ipynb), .dxf, .json, .bin, .raw, .exe, Pine Script.
3D software:	Rhinoceros (+Grasshopper), ParaView.

Research & Programming Experience

- [MATLAB](#) training in 40 hours
 - 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](#)).
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Courses & Workshops

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| • Pass MATLAB Course 2018 | • Holding MATLAB Course 2019 |
| • Pass Eclipse Course | • Holding MATLAB Course 2018 |
| • Pass PVTi from Course | |
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Language

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

- 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
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- Prof. Arash Ebrahim Abadi Associate Professor at the Islamic Azad University Qaemshahr Branch,
Department of Mining and Geology,
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