#### Personal

• Name: Said Mousa

Last: Sajadi

• Date of Birth: 18/01/1990

Gender: Male

Military service status: Iran, finished at army military police

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

#### **Education**

#### M.Sc.

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

**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.

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: Office (Excel, Word, PowerPoint, Access, Macros),

Google Workspace Applications (Sheets, Docs, Sliders, Forms),

Batch, Bash, Visual Studio Code (VSCode).

Engineering software: Monster: Eclipse & Petrel (Schlumberger), CMG (Computer Modelling

Group), F.A.S.T. (Fekete), Ecrin (Saphir, Topaze, Diamant), Emeraude,

COMSOL Multiphysics, PDSView.

Basic: Geolog(Paradigm), Techlog(Schlumberger), PanSystem, ArcGIS,

Surfer.

Programming language: Monster: Batch, Bash, Powershell, VBS, Python, JavaScript,

MATLAB, GNU Octave, Maple.

Understanding the syntax: C++, C#, C-Object, Ruby, Java, Kotlin,

Scala, Rust, Dart and Flutter, Solidity.

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 <u>Python</u>.
- 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).

### **Courses & Workshops**

- Pass MATLAB Course 2018
- Pass <u>Eclipse</u> Course
- Pass PVTi from Course

- Holding MATLAB Course 2019
- Holding MATLAB Course 2018

# 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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