

+966541699490  
Dhahran, Saudi Arabia  
saleh.z.atwah@gmail.com

# Saleh Z. Alatawah

## Subsurface/Geo Data Scientist

Website: [atwahsz.github.io](https://atwahsz.github.io)  
[github.com/atwahsz](https://github.com/atwahsz)  
[linkedin.com/in/saleh-al-atwah](https://linkedin.com/in/saleh-al-atwah)

A Subsurface/Geo Data Scientist with a passion for AI, machine learning, and deep learning, driving data-driven approaches in integrated static-dynamic reservoir characterization and geological modeling across the Oil & Gas and Mining industries. Highly experienced in AI, machine learning, and deep learning, with demonstrable robust cross-discipline expertise, working with integrated knowledge across all subsurface and engineering upstream disciplines, through the exploration, development, and mining life-cycles. Eager to apply these skills in the Mining industry, focusing on geological modeling, resource estimation, mine planning, and operational optimization while prioritizing safety through data-driven hazard identification and risk mitigation.

### EDUCATION

**Master of Science in Geo-Energy Engineering**, *Delft University of Technology (TU Delft)* Sep 2021 - Aug 2023  
**Bachelor of Science in Geology**, *University of Tulsa* Sep 2009 - May 2013

### TECHNICAL EXPERIENCE

**Geosteering Geologist** **July 2013 — June 2014**  
*Saudi Aramco* *Eastern Province, Saudi Arabia*

- Geo-steered horizontal wells in the targeted reservoir to maximize hydrocarbon production
- Minimize productivity loss.
- Prevent environmental hazards.

**Exploration Geologist** **June 2014 — July 2016**  
*Saudi Aramco* *Eastern Province, Saudi Arabia*

- 1D, 2D, and 3D Reservoir characterization and modeling.
- Regional mapping to build geological models for resource/risk assessment.
- Provided prospect generation subsurface evaluations.
- Seismic Imaging including 3D & 2D seismic processing.

**Subsurface/Geo Data Scientist** **June 2014 — Present**  
*Saudi Aramco* *Eastern Province, Saudi Arabia*

- Field-scale and regional-scale modeling
- CNN and Transformer-based deep learning for 3D geological modeling
- AI-driven fracture modeling
- Probabilistic machine learning for facies prediction
- Saturation height modeling
- Advanced mathematical modeling
- Combining static and dynamic data for decision-ready models
- Stakeholder-focused model delivery and communication

**Data Scientist** **January 2018 — Present**  
*Freelance* *Eastern Province, Saudi Arabia*

- Building Machine Learning and Deep Learning models to predict insights of clients data and create value.

### TECHNICAL SKILLS

<b>Languages</b>	Python, R, Julia, Git, $\LaTeX$ , Markdown, HTML, Bash
<b>Machine Learning</b>	Pandas, NumPy, PyTorch, TensorFlow, scikit-learn, OpenCV
<b>Geological Software</b>	Petrel, Techlog, RMS, Opendtect, Geolog, ArcGIS, QGIS
<b>Other</b>	Linux, Dockers, Distributed Systems, MySQL, Adobe Photoshop, Adobe Illustrator

### ACHIEVEMENTS, AWARDS AND PUBLICATIONS

**IBM Certified Professional Data Scientist** **July 2020**  
• [click here for credential](#)

**Patent : "System and method for detection of carbonate core features from core images"** **March 2020**  
• Patent Granted , using AI in geoscience. [click here for google patents link](#)

**Barrel Awards Winner** **July 2015**  
• Won the barrel awards competition for the best hydrocarbon prospect in Saudi Aramco

**Well-Log-Based Reservoir Property Estimation With Machine Learning: A Contest Summary** **February 2022**  
• [Journal Paper](#)

+966541699490  
Dhahran, Saudi Arabia  
saleh.z.atwah@gmail.com

# Saleh Z. Alatwah

## Subsurface/Geo Data Scientist

Website: [atwahsz.github.io](http://atwahsz.github.io)  
[github.com/atwahsz](https://github.com/atwahsz)  
[linkedin.com/in/saleh-al-atwah](https://linkedin.com/in/saleh-al-atwah)

---

### Using Sentiment Analysis to Evaluate First-year Engineering Students Teamwork Textual Feedback"

March 2022

The purpose of this research is to investigate the possibility of using SA as a method for evaluating collaborative textual feedback (eg, comments) from students and to assist teachers in evaluating teamwork dynamics in their classrooms.. [Conference Paper](#)

### A.N. Murray Award in Geosciences

May 2012

- Outstanding academic achievement as an undergraduate

### EAGE GeoHack

Dec 2019

- Won EAGE hackathon held in Manama, Bahrain.

### SPWLA machine learning competition

July 2021

- Scored 4th Place.