

Summary

I am a master's student in **Petroleum/Drilling Engineering** at Amirkabir University of Technology, holding a bachelor's degree from Sharif University of Technology. My expertise **bridges** petroleum engineering, data science, and machine learning, enabling me to optimize drilling operations through data-driven solutions.

I am highly interested in programming and data analysis that has made me to create web applications with **Python**, **Django framework** and **machine learning** algorithms. My primary focus is on drilling data analysis, predictive modeling, and **optimization** using artificial intelligence and machine learning to **enhance operational efficiency** in the petroleum industry.

I thrive on challenges and possess a dynamic, **problem-solving** mindset.

Currently, I am involved in the development of drilling optimization and **data management systems** using machine learning and real-time analytics for enhanced decision-making.

My bachelor's thesis was centered on the **development of an Android application for downhole calculations**, specifically focused on **choke** design in **production engineering operations**.

Experience

Sharif University of Technology & NISOC | Iran, Tehran

Drilling Engineering android application (Bachelor project) | 02/2023 - 06/2023 (4 months)

- An android application for downhole calculations such as choke and especially calculate Drilling parameters (ProMate)

Dana Energy | Iran, Tehran

Drilling Data Analysis Trainee | 07/2023 - 10/2023 (3 months)

- Designing an online dashboard for recording daily drilling reports (DDR) using the Django framework
- Collaborating on building a data management dashboard using the PowerBI tool

Freelancer | Iran, Tehran

Freelancer programmer | 05/2020 - 06/2022 (2 years)

- Implemented Python-based solutions to address client projects

Education

Amirkabir University of Technology | Iran, Tehran

Petroleum Engineering - Drilling Engineering (M.Sc.) | 2024 - Present

Sharif University of Technology | Iran, Tehran

Petroleum Engineering (B.Sc.) | 2019 - 2024

- Bachelor Thesis: Development of Android application to perform downhole calculations such as choke in production engineering

Salam (high school) | Iran, Tehran

Mathematics | 2016 - 2019

GPA: 19.5 out of 20

Skills

Intermediate Familiarity in specialized petroleum engineering software: **Olga** | **Petrel** | **Saphir** | **Prosper** | **Eclipse** | **Pipesim**

Proficiency in specialized drilling engineering software: **Well View** | **Landmark**

Proficiency in: **Python** | **Back-end(Django)** | **Django Rest-Framework** | **Machine Learning** | **Data Visualization** | **Word** | **PowerPoint** | **Canva** | **Telegram Bot** | **Android Development(python-kivy)**

Intermediate in: **Front-end(Html & CSS)** | **MySQL** | **WordPress** | **PowerBI** | **Excel** | **Sqlite3** | **Postman** | **Redis** | **Celery** | **CI/CD** | **Docker** | **Dart(programming language)** | **Android Development(Dart-Flutter)** | **Streamlit**

Familiarity with: **Autocad** | **Matlab** | **Photoshop** | **Figma** | **Illustrator** | **GIT** | **C#** | **PostgreSQL** | **SQL Server**

Languages

English | above the intermediate level

Certificates

Django Developer | Maktabkhooneh | 08/2022

Saphir Petroleum Software Course | Sharif University of Technology | 10/2024

Machin Learning & Data Science | Maktabkhooneh | 03/2025

Landmark Course | MyOpak | 04/2025

Well View Course | MyOpak | 04/2025

Projects

Drilling Data Management Dashboard | 2024 - Present

A comprehensive web-based platform for data collection, analysis, and optimization in drilling operations

- Daily Reports Collection Module
- Optimization Module
- Report Generation & Export Module
- Interactive Analytical Dashboards
- High security and user access level determination

Petrochemical Management Dashboard | Petro Beniz | 01/2025 - 03/2025 (3 months)

A comprehensive Power BI-based platform for monitoring and analysis in petrochemical operations

- Human Resources Management Module
- Market Price Prediction Module
- Risk & Hazard Assessment Module
- Pollutant Emissions, Production, and Feed Consumption Module
- Export & Import Tracking Module
- Catalyst Analysis Module

Android Application for Petroleum Engineering Calculations | SUT & NISOC | 02/2023 - 06/2023 (4months)

A specialized offline Android application for petroleum engineering calculations and offline access to essential engineering data.

- Choke Design Calculation Module
- Company Magazines & Equipment Guide Access Module
- Drilling Calculations Module
- Casing & Tubing Information Module

Covid 19 World Vaccination Progress Prediction | 03/2025 (1 week)

Developed a machine learning model to predict the vaccination trends for COVID-19 using historical vaccination data.

- Preprocessed data, handling null values, performing data visualization, and feature engineering to enhance model performance.
- Implemented various regression models and evaluated their performance using cross-validation.
- Selected the best-performing model based on test data results
- Tuned hyperparameters for optimal model performance, achieving 98% accuracy on test data
- Developed a Streamlit dashboard to visualize the model's predictions

ROP Prediction for Drilling Operations | 01/2025 - 02/2025 (1 month)

Developed a machine learning model to predict Rate of Penetration (ROP) in drilling operations trained on data from one well and tested on another.

- Trained the model on well data, including various features such as drilling parameters, rock properties, and operational conditions.
- Evaluated model performance by testing on data from a second well, achieving 83% accuracy in predicting ROP.
- Performed data preprocessing, feature selection, and model evaluation to optimize the predictive performance of the model.

Freelance Projects | 05/2020 - 06/2022 (2 years)

- Parking Simulation using Pygame and PyQt.
- Website backend development for clients using Django.
- Password Manager Application with functionality for password hashing and de-hashing using Tkinter.
- Developed To-Do and Weather Apps using Kivy.
- ...