# **IBRAHIM CHAUDHRY**

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#### **EDUCATION**

The University of Texas at Austin Bachelor of Science in Petroleum Engineering

December 2024

**EXPERIENCE** 

#### **Tower Rock Oil and Gas**— Engineering Intern/Part-time Engineer

May 2024 - Present

- · Assessed economic worth for deals totaling over \$10 million, safeguarding company interests.
- · Produced 100+ economic reports in Enertel Spotfire from type/decline-curve analysis, improving viability assessments.
- · Conducted comprehensive valuations of oil and gas leases/royalties, including detailed title research and analysis, verifying DOI and NRI calculations. Assisted in Mineral Rights Acquisition by conducting due diligence to support informed decision-making.

Certifications: Elements of Computing

- · Performed Decline Curve and Type Curve Analysis for predicting future production rates, reservoir characterization, and well performance evaluation
- · Executed Discounted Cash Flow Analysis to assess the economic viability of projects.
- · Utilized Enertel Spotfire and Enverus for data visualization, market analysis, and strategic planning to drive business decisions.

June 2023 - August 2023

# **Summer Undergraduate Research Internship** – *Undergraduate Researcher*

- · Conducted research on flow assurance wax (paraffin) deposition employing a cold finger model.
- · Evaluated various types of steel with comparable roughness to identify the steel variant prone to maximum deposition accumulation.
- · Additionally, compared samples of High Temperature Gas Chromatography across diverse steel types, varying temperatures, and oil rotation speeds for comprehensive analysis.

# iCode Southlake – Technical Lead and Marketing Strategist (part-time); Remote

April 2022 – August 2022

- ·Lead data-driven marketing campaigns for academic programs with a goal of 5% increase in conversion rate
- ·Delivered computer science curriculum for over 300 K-12 students, instilling life-long learning skills for the next generation

#### PROJECTS/COURSEWORK

### **Projects:**

• Energy A.I. Hackathon 2024

February 2024

- Created a Python-based data analytics and machine learning workflow to forecast the average pump difference during drill out for a set of 15 wells.
- Utilized a diverse array of predictor features, incorporating both single estimates and an uncertainty model represented by 100 realizations per well.

#### Coursework:

- High Performance Computing for Engineers
  - O Introduced UNIX/Linux environments, HPC resources, parallelization paradigms (MPI, CUDA), and Julia programming in a scientific computing course.
- Reservoir Engineering III (Simulation)
  - Applied mathematical equations and numerical methods to model fluid flow in reservoirs and performed numerical reservoir simulation, including well treatment and history matching.
  - o Completed a simulation project using a commercial simulator, gaining hands-on experience in reservoir engineering.

# LEADERSHIP EXPERIENCE AND ACTIVITIES

# **UT Muslim Student Association** – *Education Director*

May 2021 - December 2021

- Organize events with professionals from various fields to allow students on the university campus to have access to the experts.
- Lead and participate in weekly planning meetings
- Set up activities with college students to build a culture of care, trust, and teamwork

## **Helping Hand for Relief and Development** – *Southfield, MI* – Lead Volunteer

Jan 2021 - Aug 2021

- Packed food and clothing for donations around the world and in the US for those that are in need in times of famine, natural disasters, and COVID
- Sound knowledge of food pantry operations
- Familiarity with food storage and rotation procedures
- Ability to efficiently sort, stock, carry, and unload food and clothing boxes.

#### **PUBLISHED WORKS**

**Paper** Experimental Investigation of Wax Deposition on Multiple Steel Alloys, Journal of Petroleum Science and Engineering, vol. 212, 2024. Co-authors: Derek Burmaster, Ibrahim Chaudhry, Yingda Lu.

#### **SKILLS AND INTERESTS**

Languages: Urdu (Native), Hindi (Fluent), Arabic (Intermediate), Spanish (Beginner)

Technology/Skills: Python, Julia, SQL, Excel, CMG, MS Office, Research, Data Analysis, Consultative Skills, Work Ethic, Problem-Solving, Interpersonal Skills, Spotfire, Enverus(DI/Prism) Certified, Combo Curve Certified, Enertel

Interests: Consulting, Data Science, Analytics, Reservoir Engineering, Flow Assurance