

Ahad Momin

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EDUCATION

The University of Texas at Austin

Bachelor of Science, Petroleum Engineering Honors

December 2019

GPA: 3.90/ 4.0

Iceland School of Energy

Renewable Energy and Sustainability Capstone Program

March 2018

EXPERIENCE

EOG Resources – Completions Engineering Intern | San Antonio, TX

May 2019 – August 2019

- Spent 3 weeks in Eagleford play understanding and observing frac rig up, execution, and rig down for both electric and conventional frac fleets as well as wireline, coil-tubing, and toe port operations
- Gained proficiency in SQL, VBA, Python, and Spotfire to fetch, organize, and visualize data from EOG Oracle and MemSQL database
- Designed real-time automated economic analysis tool to evaluate value of lateral footage during frac operational issues by using improved NPV approximation method by integrating EOG's iTypeCurve software API and SQL data into VBA
- Conducted successful and cost-effective decisions in 2 wells with incorrectly set frac plugs using economic analysis tool
- Produced automated plots for ROR and NPV vs. Completions Costs for each well to analyze cost thresholds during frac operations
- Built automated calculator to generate maximum required maintenance times when selecting various pump rates

EOG Resources – Production Engineering Field Intern | Jal, NM

May 2018 – August 2018

- Spent 12 weeks in Delaware Basin shadowing production foreman, lease operators, roustabouts and artificial lift technicians
- Gained basic understanding of production-related processes from wellbore to sales, including separators, electronics, tanks, compressors, plunger lifts, flares, rod pumps, gas lift, and electrical-submersible-pumps (ESPs)
- Observed workover rig, wireline, swab, hot oiling, and equipment testing in Don-Nan shop
- Tested EOG Gas Lift Optimization app (GLOpt) for Localized Gas Lift systems (LGL) during compression downtime
- Established GLOpt on 4 LGL systems which maximized oil production with division-wide 200+ BOPD potential increase

UT Rig Automation Performance Improvement in Drilling (RAPID) – Research Assistant

January 2018 – May 2018

- Collaborated with research team to develop algorithms for GPS in pad drilling operations
- Assessed drill bit condition in real time in order to recommend times to trip out and replace drill bit
- Developed methods to visualize, benchmark, and interpret drilling data and derive key performance indicators

UT Graduates Linked with Undergraduates in Engineering (GLUE) – Research Assistant

January 2018 – May 2018

- Conducted liquid chromatography study in wet lab setting to efficiently quantify polar characteristics of bitumen
- Analyzed and compared lab results with existing standards to verify effects of bitumen aging

PROJECTS

Optimizing Hydraulic Fracture Design Using Multi-Frac Pseudo 3D

September 2018 – December 2018

- Ran simulations on Multi-Frac P3D to visualize distributions of fracture geometry, proppant, and fluid in each cluster of stages
- Solved problem of heel-dominated clusters by running optimizer function to achieve treatment design

Digital Twinning for Geothermal Power Systems in Iceland

March 2018

- Created software business model for United Nations Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure)
- Collaborated in international student teams to optimize existing algorithm using digital twinning for geothermal power systems

Offshore Drilling Design in Gulf of Mexico

August 2017 – December 2017

- Designed directional plan, mud window, casing, cement, drill string, BHA, and BOP for vertical and horizontal drilling
- Created reports on different well programs and AFE cost estimates necessary for drilling a \$46 million well

LEADERSHIP

American Association of Drilling Engineers (AADE) | UT Austin Chapter

Vice President Internal

August 2018 – April 2019

- Collaborated with 5-person officer team to network with companies and organize weekly general meetings
- Updated club website and led 5-person merchandise committee to design products for new events
- Delivered presentations for Cockrell School of Engineering and other organizations to increase student participation

Society of Petroleum Engineers (SPE) | UT Austin Chapter

Fundraising Committee Chair

September 2017 – May 2018

- Held weekly office hours to ensure members and students received food, supplies, and services
- Designed SPE logos and shirts for new events and made continuous improvements based on committee feedback

SKILLS

Computational: Python, SQL, VBA, MATLAB, Unix, Spotfire, CMG, Multi-Frac Pseudo 3D, Efrac, eVin, and Adobe Suite

Languages: Fluent in English, Hindi, and Urdu; Conversational in Spanish

ACHIEVEMENTS

- UT College Scholar Honors Award
- Paul Bommer Endowed Scholarship
- Unrestricted Endowed Presidential Scholarship
- Whiting Endowed Presidential Scholarship
- Pioneer Natural Resources Scholarship
- Apache Corporation Scholarship