

Grace Tolly

(903)269-6297 gracetolly@tamu.edu

Linkedin: www.linkedin.com/in/grace-tolly-petroleumengineering

Summary

Determined and organized Petroleum Engineering Professional fluent in Python coding and its applications, searching for a career in the energy industry. Proven ability to delegate and lead groups toward a common goal while adapting to challenges. Comfortable with project or detail based work and leadership opportunities, roles, and responsibilities. Excellent time management capability coupled with high level critical thinking abilities, dedication, and persistence.

Education

Texas A&M College Station

August 2019 - May 2025

- **Bachelor of Science in Petroleum Engineering**
 - Minors: Geology, Engineering Project Management
 - Focus: Python application to Data Analytics and Machine Learning

Work History

Apache Corporation

May 2024 - August 2024

- Reservoir Engineering Intern
 - Finalized a data pipeline between public data sources and private servers using **Microsoft SQL servers, Python, Java, TIBCO Spotfire, Enverus, and IHS S&P**
 - Designed field proposals in the Delaware Basin based on area analytics of completion, spacing, and production; validating production forecast with **Machine Learning and Artificial intelligence**

Gas It Up

January 2023 - August 2023

- Data Analytic Intern
 - Created 25+ python scripts to be used for future data processing
 - Processed upwards of 2.5 million lines of data through implementation of Python scripts
 - Improved Microsoft Excel and Access skills while ensuring quality assurance through meticulous inspection of data authenticity using **EIA and ArcGIS**

Texas A&M College Station Engineering Department

August 2020 - May 2025

- Teaching Assistant
 - Providing Office hours for specialized Python support and individualized information for students
 - Supplying supplemental instruction to 250+ Engineering Students about various assignments, topics, and questions, focusing on Python coding and its uses
 - Ensuring accurate grading processes and transcription into TAMU official systems; organizing the grading set times, duration, rubric, managing following assistants with their time constraints, monitoring FERPA compliance, and delegating tasks if needed

Texas A&M College Station Audio Visual Services

January 2020 - May 2025

- Student Technician
 - Providing maintenance/troubleshooting and assisting professors with the use of classroom technology (including projectors, computers, TAMU networks, server access, remote access, smartscreens, etc)
 - Delegation and cooperation to distribute software and hardware in a timely manner to areas of campus
 - Reported areas of issue that needed additional assistance through ticketing system in contact with all other IT partners

Brookshire's Grocery Company

April 2017 - May 2025

- Office Cashier / Certified Pharmacy Technician in Training
 - Processing large monetary transactions (Western Union, Lottery, Check Cashing, etc.)
 - Determining and tracking accountability for all monetary transactions in the store by managing up to 15 employees and providing support for employee responsibility
 - Assuring prompt and efficient processing of filling, labeling, and filing of 175+ prescriptions daily, and sale of 75+ customer prescriptions daily
 - HIPPA Regulation Knowledge and Compliance

Research

- Internship TAMU Innovate 4 Defense: Missile Defense Agency January 2021 - July 2021
 - Collected research in interviews from parties operating and working in the nuclear radiation testing field with Cyclotrons, Particle Accelerators, Energy production and efficiency, and other related areas
 - Organized and highlighted similarities and common issues facing heavy ion test facilities and users in weekly presentations to 25+ member audiences
 - Created solution options for the industry as a whole, individuals/small groups of users and operators
 - ***Published Work*** - accepted submission to the *Institute of Electrical and Electronics Engineers* 'Radiation and its Effects on Devices and Systems' international conference. '*Identifying Common Problems Surrounding Heavy Ion Test Facilities and Users*'
- Lab Scale Drilling System - Aggie Research Certificate Recipient January 2022 - May 2022
 - Organized within a group to **design, discuss, order, and assemble a working prototype for a Lab Scale Drilling model** for the purpose of educational labs regarding the hardware and software created and participating in the Drillbotics competition in future semesters
 - Headed the **Flow loop and Drill Stem System teams** and created and placed final parts orders
- Student Paper Contest
 - 3rd Place achievement, recognition and award; Junior Section January 2023
 - '*Artificial Intelligence Allows Real-Time Prediction of Pressure Gradient in Unconventional Reservoirs*' - Focus on **Machine Learning AI increasing efficiency and reduction of risks while drilling** unconventional wells, particularly tight or overpressured shale formations
 - 3rd Place Achievement, recognition and award; Senior Section January 2025
 - '*Machine Learning Replaces Manual Historical Production Forecasts for Infill Wells in the Delaware Basin*' - **Producing production forecasts in under 2 minutes at ~95% accuracy** comparable to engineer produced methods with best practices

Leadership Positions

- Internal Vice President - International Association of Drilling Contractors Student Chapter (2023-2024)
- Hullabaloo Band Mellophone Co-Lead (2022-2025)

Certifications

- **Saphir** (Pressure Transient Analysis, Rate Transient Analysis) - Kappa Engineering
- Introduction to **Artificial Intelligence** - National Association of State Boards of Accountancy (NASBA) (Continued in Data Analytics & Machine Learning Courses and Student Paper contest Awards (above))
- **TIBCO Spotfire** for Oil and Gas Professionals- SAGA Wisdom
- **Geothermal Reservoir and Hydraulics Design** - SAGA Wisdom

Skills

- Fluent in Python coding software including Spyder, Pycharm, Jupyter, VSCode interpreters, and modules
- Self Disciplined, Attention to detail, Proactive problem solver
- Understanding of professional communication and presentation creation and exhibition
- Intermediate in **InteractivePetrophysics, CMG, Emerald, CoViz4D, SGems, Kappa Citrine, Spotfire**
- Fluent in Microsoft products (Excel, Word, Powerpoint, etc)

Extra Curricular Activities

- Texas A&M University Hullabaloo band (4 hr/wk)
- Brazos Valley Band, The Big band Jazz (6 hr/wk)
- Tutoring in the TAMU College of Engineering (5-10 hr/wk)
- Society of Petroleum Engineers Technical Advancement, Merchandise, & Fishing Tournament Committees (5-8 hr/wk)
- Animal Rescue/Fostering (Aggieland Humane, Zoi's Rescue, etc)