# SHAHRUKH AHMED

shahrukh.ahmed@utexas.edu • (903) 203-5309 • LinkedIn • GitHub • Austin, TX

## **EDUCATION**

### **B.S.**, Petroleum Engineering

December 2026

The University of Texas at Austin | Overall GPA: 3.16/4.00 Major GPA: 3.55/4.00 Relevant Coursework: Python, C++, Drilling and Well Completions, Transport Phenomena

#### **PROJECTS**

## Pipe Flow Analysis Tool

March 2024

- Created Python-based solution to analyze hydraulic pipe flow using Colebrook-White and nonlinear equations
- Streamlined flow rate calculations using Python classes to analyze data and identify adequate pipe size based on flow rate
- Simulated pipe flow dynamics to find required pipe dimensions and relationships with diameter, velocity and head loss with SciPy

#### **Interactive Colored EOG Well Map Pipe**

April 2024

- Developed geospatial data visualization tool through Bokeh on Python harnessing data from OpenStreetMap
- Automated aggregation and data analysis from CSV files through Python classes
- Designed interactive tool with LinearColorMapper to highlight data differences between well locations

#### Supercharged Lexus LS400 - Project Car

May 2024 - July 2024

- Fabricated custom mounts for transmission cooler and water-to-air intercooler and custom intake manifold to install supercharger
- Machined and welded rear subframe to transplant upgraded rear differential to enhance vehicle performance
- Systematically analyzed and recorded performance metrics before and after installation to quantify horsepower gains of 30%

#### SKILLS AND CERTIFICATIONS

- Proficient in Python, C++
- Applications: Solidworks, VS Code, AutoCAD, Fusion 360, Revit, Bash
- Languages: English, Spanish, Japanese
- Soft Skills: Attention to detail, strong work ethic, flexibility, technical communication, leadership
- Certified in Adobe Premiere Pro, Photoshop, Commercial Photography

### **EXPERIENCE**

## **Project Lead** – Corsicana ISD Audio Visual Tech

August 2018 - May 2022

- Managed groups of 8-12 students to analyze and solve complex problems (i.e., travel, shot selection)
- Improved interpersonal skills by training students on directing and event setup
- Coordinated production of video to be nationally televised regarding advertising of the Navarro County Pro Rodeo

#### **Team Manager** – Tiger Esports

November 2020 – May 2022

- Coached a team of 5 players in and after games practicing effective teamwork strategies
- Improved team communication 30% by reducing unnecessary dialogue
- Adapted and filled in for team members and participated in competition while coaching

# Ramshorn Academic Coach - UT Austin Engineering Student Services

August 2023 - Present

- Mentor freshman engineering students during transition from high school to university
- Provide supportive community by introducing various campus resources and student organizations
- Improve communication in 1-on-1 settings with fellow engineers

# **ORGANIZATIONS**

# ${\bf UT\ Austin\ Society\ of\ Petroleum\ Engineers} - {\it Officer}$

August 2022 - Present

- Direct outreach for community activities and weekly newsletters
- Coordinate four recruitment events in two weeks, resulting in induction of 20 new members
- Increase membership by 20% through expanded print advertising and Instagram social media marketing campaign

# University Leadership Network (ULN) – Scholar

August 2022 - Present

- Produce corporate outreach and programming for member meetings and social events
- Organize internal events within the ULN program such as late-night study sessions
- Lead small group discussions over various campus topics with other members

# **UT Society of Hispanic Professional Engineers** – *Active Member*

April 2023 - Present

- Work with academic director to organize weekly study nights for engineering exams
- Leverage skill-building workshops and seminars, increasing insight into industry
- Volunteer and collaborate with community director to recruit members at orientation