SAHIL SHAH

sahil0203@utexas.edu • LinkedIn.com/in/sahilshah0203

EDUCATION

The University of Texas at Austin Bachelor of Science, Mechanical Engineering May 2025
Minor: Computer Science
95 hours

EXPERIENCE

The Home Depot – *Software Engineering Intern;* Remote May 2023 – Aug 2023
Technologies Used: Google Cloud Platform (Vertex AI, BigQuery), Kubeflow Pipelines
• Built a Python ML pipeline to automate the population of Big Query column descriptions, enhancing data discoverability
• Engineered a prompt for Google PaLM 2 LLM, and ran the model using SQL (BQML) to generate descriptions with 70% accuracy
• Validated model responses using BERTScore and a human-observed sample size, saving 100+ man-hours
• Scaled the pipeline by parallelizing API calls so that employees can retrieve descriptions for any given table

Texas Department of Transportation – *Engineering Support Intern;* Austin, TX May 2022 – Aug 2022
Technologies Used: PowerShell, Microsoft System Center Configuration Manager (SCCM)
• Deployed script in waves to update 10,000+ company devices to Windows 21H2; Troubleshot until 100% success
• Automated device backup/restore and desktop notifications with SCCM to prevent human error on recurring tasks
• Configured 18 laptops and iPhones with a specific UI as a kiosk system for a company conference
• Innovated a method to customize laptop set-up process with a scripted, auto-run USB drive, streamlining manual process by 50%

ACADEMIC PROJECTS

Wine Quality Predictor – *Client: The Home Depot* Summer 2023
Technologies Used: Scikit-Learn, Kaggle, Pandas, Python
• Trained a machine learning model that predicted wine quality with 61% confidence
• Determined the quality on a scale 1-10 based on 11 factors using a RandomForrestRegressor

Drone – *Client: Unmanned Aerial Vehicles Austin* Spring 2023
Technologies Used: Arduino, Python
• Programmed AI flight control algorithm for the drone to travel the safest and quickest path to and from destination
• Brainstormed future applications such as campus emergency medical supply delivery or campus tour guide

Scheduling App – *Personal organization aid* Winter 2022
Technologies Used: Flask, React JS, Python
• Architected a full stack web application to optimize a custom schedule for a school week with input assignments
• Aided my personal time management by splitting up tasks over time by priority

iMessage Analysis – *Personal* Spring 2022
Technologies Used: MySQL, Microsoft Excel
• Extracted text message data from iPhone and graphed data to find meaningful patterns
• Drew correlations between factors such as number of texts sent, person texts were sent to, and when they were sent

Household Object Finder – *Client: UT Austin* Fall 2021
Technologies Used: TensorFlow, Computer Vision, Java
• Competed in a hackathon for the most accurate ML model to identify certain objects from living room pictures
• Utilized a neural network to successfully identify all 38 unique household objects required by the rules

ADDITIONAL INFORMATION

Goal: To find an internship in SWE, ML, or DS that further develops my skills in hopes of getting one step closer to a full time job
Coursework: Software Design, Data Structures and Algorithms, Linear Algebra, Statistics, Computational Methods (MATLAB)
Interests: Music Production, Project Cars, Entrepreneurship, Drawing, Traveling, Cooking
Activities: Dancer on Texas Raas (ranked 1st nationally), Member of American Society of Mechanical Engineers, Tennis Coach