Tianze (Eric) Qian

tianzeqian@gmail.com
1-(281)-323-9986
https://www.linkedin.com/in/tianzeqian/

16530 Village View Trl
Sugar Land, TX 77498
https://www.github.com/ericqian1/

EXPERIENCE

Pioneer Natural Resources, Irving, TX   Feb 2020 - Present
Senior Data Scientist
- Develop statistical methods for separation of fugitive and processed methane emissions for accurate reporting and tracking
- Feature engineering for engineering process and economics optimization
- Improve database standards and develop data pipelines for scalable ingestion

Kayrros, Houston, TX   March 2020 – Feb 2022
Data Engineer
- Develop commercial product transforming anonymized geolocation signals to mileage and fuel consumption datasets
- Develop scalable asset monitoring product implementing change detection algorithms on low-res satellite imagery
- Compute metrics and classification algorithms against TB-volume geolocation dataset – leveraging PySpark, Hadoop, S3
- Deploy and automate several projects via Airflow, Kubernetes, Docker, and GitLab CI/CD in production environments
- Provide support, maintenance, and debugging of internal dashboards and products in production
- Design, document, and functionalize clients REST/Python APIs to better serve data
- Write and publish weekly newsletters of fundamental analysis of fuel demand to clients
- Lead technical product meetings with client data science teams to introduce and deeply describe product methodologies

Apache Corporation, San Antonio, TX   Dec 2017 – March 2020
Data Scientist, Analytics Engineer
- Engineered and deployed regression models of wellbore drilling costs to improve capital allocations accuracy by 20%
- Engineered and deployed classification models on invoice AFEs to improve invoice routing accuracy by 40%
- Implement parallelized algorithms ETL/visualization processes on 600 TB fiber optic data for frontend Dash application
- Implement and scale Airflow data pipelines to create ETL processes against OSI Pi, Hadoop/Hive, REST APIs, etc.
- Developed high-frequency drilling data project of 10 automated statistical reports with over $500K annual market value
- Automated over 100/manhours per week with automated reports and data pipelines over several disciplines and departments
- Developed Python reporting library to facilitate automated HTML e-mailing and PDF generation built on jinja2 and reportlab
- Applied fundamental petroleum engineering in automated reports and analytical tasks for engineering operations

Integra Financial and Economic Consulting, Austin, TX   May 2016 – Dec 2016
Data Analyst Intern

EDUCATION

Georgia Institute of Technology GPA: 4.00/4.00	Master of Science, Analytics, Computational Data Analytics	August 2021
The University of Texas at Austin GPA: 3.74/4.00	Bachelor of Science, Petroleum Engineering, Honors Program Bachelor of Arts, High Honors, Economics Minor in Computer Science Dr. Eric van Oort RAPID Group, Undergraduate Research Assistant	May 2018

ADDITIONAL SKILLS/INFORMATION

Software: Python, R, MATLAB, C++, VBA, Git, Linux
Machine Learning: Sklearn, PyTorch, supervised learning, reinforcement learning, Bayesian statistics, simulation
Data Engineering: Hadoop stack, Airflow, Luigi, Kubernetes, Docker, ElasticSearch, AWS S3, SQL, REST API
Application Development: Dash, Plotly, Matplotlib, HTML, CSS, Django
Languages: Fluent in English and Mandarin
Interests: Options trading, investing, producing music, basketball analytics, chess
Work Eligibility: U.S. Citizen, eligible to work in the U.S. with no restrictions
Mobility: Open to remote work throughout the U.S, and on-site work in Houston (preference), Dallas, and Austin