Lawrence Liu

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EDUCATION

New York University, College of Arts & Science   **New York, NY**
Bachelor of Arts (BA) in Economics   *Graduated: May 2021*

- Coursework: Data Science, Machine Learning for NLP, Statistics, Econometrics, Web Design

TECHNICAL SKILLS

- Tools & Frameworks: AWS, GCP, Snowflake, dbt, React, Spark, SQL Server, PowerBI, Report Builder (SSRS), SSIS, Git
- Languages: Python, SQL, JavaScript, HTML/CSS
- Certifications: GCP Data Engineer, AWS Machine Learning Specialty, Snowflake SnowPro, Snowflake SnowPro Advanced Data Scientist, dbt Analytics Engineering, Astronomer Airflow Fundamentals & DAG Authoring

EXPERIENCE

phData – Data Engineering Services (2022 Snowflake Partner of the Year)   **Remote**
Data Engineer | Python, SQL, AWS, Snowflake, MLflow   *May 2022 – Present*

- Built production data and machine learning pipelines with Airflow, Glue, and Redshift to provide dollar sales and ingredient usage forecasts to 2400+ Chick-fil-a restaurants for inventory ordering applications, processing billions of data points weekly, optimizing queries and decreasing end-to-end pipeline runtimes by 16+ hours
- Designed Redshift schemas and implemented Flyway as a best practice to version control DDL database migrations
- Continued upskilling on data products and collaborating with the Snowflake team to develop machine learning POCs and publish learning resources to the Snowflake community

Epic Systems – Healthcare Software   **Madison, WI**
Analytics Engineer/BI Developer |Python, SQL, JavaScript, HTML/CSS, Report Builder, PowerBI   *June 2021 – May 2022*

- Built out the ETL process of the reporting SQL Server database using SSIS packages
- Developed an automated notification framework for the 3500+ Solutions Engineering division allowing for easy project tracking and compliance monitoring for managers
- Directly reported to the SVP, tasked with conducting deep dives into existing processes to deliver data solutions for areas needing improvement, such as automating the annual hiring target calculation for HR and Staffing Leads
- Created and maintained hundreds of pixel-perfect reports and dashboards for customers and internal stakeholders using Report Builder and PowerBI queried over 300 thousand times monthly

PROJECTS

Superbowl Index | *Javascript, Three.js, GSAP, Python*   *lwrncliu.com/superbowl_index*

- Designed and developed a website to investigate the one-year performance of companies with 2022 Super Bowl ads, processed stock data and created images, stored on GCS, with Python

Running Bricks | *Javascript, Three.js, Node.js*   *lwrncliu.com/running_mu_biao*

- Designed and developed a 3D website with Three.js to track my running goals for 2023 complete with a Node.js GitHub Action to pull running data from Strava daily

NFL Honey Combs | *JavaScript, D3.js*   *lwrncliu.com/nfl_honeycombs*

- Designed and developed a web-based visualization of NFL team performances for the 2021-2022 season portrayed by honey combs and bees using D3.js

3D Basketball Shot Charts | *Python, Plotly, Dash, PySpark*   *basketball-3d-shots.onrender.com*

- Designed and developed an interactive 3D visualization of NBA shot charts using Plotly and Dash, processed 21 years of NBA data using PySpark, designed table schemas on BigQuery, and used principles of quadratic equations to calculate ball flight path coordinates in 3D space

PERSONAL INTERESTS

- I enjoy playing tennis and running