FAUSTO LOPEZ

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SUMMARY

- **10+ years as a Full Stack Software Engineer** with a specialization in data analysis and business analysis, possessing a solid understanding of data modeling, data mapping, data profiling, data engineering, and ETL techniques.
- P**roficient in continuous integration/continuous deployment (CI/CD)** practices, ensuring seamless and efficient code deployments.
- E**xpertise in analyzing terabyte-size data sets** and generating actionable insights by writing complex queries and scripts in SQL, SQL Server Management Studio, R, and Python.
- **Skilled in developing and designing interactive dashboards** to support data analytics and visualization for executives using Tableau and R-Shiny.
- D**eployed and managed RStudio Workbench and RStudio Connect servers**, enhancing data science workflows and collaboration.
- E**xperience in schema design and database management** for Postgres and ClickHouse, ensuring efficient data storage and retrieval.
- B**uilt robust applications and dashboards using R-Shiny** for both public and internal use, enhancing user engagement and data accessibility.
- A**pplied data analysis and data cleansing techniques** in Excel, including creating calculated fields, pivot tables, lookups, functions, formulas, graphs, and charts.
- D**eveloped and presented various predictive models** using techniques such as linear regression, logistic regression, K-means clustering, and K-Nearest Neighbors to predict individual and industry behaviors.
- E**xcellent written and verbal communication skills**, adept at translating technical concepts into business language and vice versa, ensuring clear and effective communication with stakeholders.

SKILLS

R, Python, SQL, SQL Server Management Studio (SSMS), QGIS, ClickHouse, Postgres, Spark, Tableau, Rstudio Connect, Rstudio Workbench

WORK EXPERIENCE

BAO Systems   Remote, D.C. Based
Senior Software Engineer   *September 2021 – Present*

- D**esign and develop infrastructure for an Analytics Platform utilized by Data Scientists across the Federal Government space, ensuring scalability and robustness.
- E**ngineer and build complex web applications to solve both internal and external big data challenges, integrating APIs for seamless data exchange and enhancing application functionality.
- C**ollaborate in a 5-person team to develop R packages and web applications, facilitating the processing of valuable health data in over 45 remote countries worldwide to secure funding assistance, with a focus on API integration for data retrieval and submission.
- M**anage GitHub repositories, overseeing version control, code reviews, and collaborative development practices to maintain high code quality and project coherence.

Taxi & Limousine Commission, City of New York New York, NY
Director of Data Engineering & Analytics, Policy & External Affairs Department *September 2019 – 2021*

- Design and build schema and stored procedures for new SQL Server analytics database.
- Script Python, R and SQL queries for data exploration, data validation and ETL procedures.
- Develop data visualization plan coordinating analysts to build SSMS reports increasing data access across agency.
- Collaborate with various business users to translate business requirements into reports and actionable insights.
- Manage custom-built web applications, ensuring they meet business requirements, maintain scalability, and integrate seamlessly with existing systems.
- Review and develop core data documentation for internal clients and leadership.

Taxi & Limousine Commission, City of New York New York, NY
Data & Analytics Manager, Policy & External Affairs Department *July 2016 – August 2019*

- Defined KPIs and automated Python, R and SQL scripts to produce internal and public-facing metrics.
- Designed schema and managed Postgres and ClickHouse databases.
- Implemented parallelization in R and SQL scripting jobs that lead to a 400% increase in reporting speeds.
- Prototyped and built a driver income calculator which is utilized by over 180,000 taxi drivers in New York City.
- Built and released an R-Shiny-based public dashboard, the TLC Data Hub, which showcases taxi KPIs and trends.
- Spearheaded landmark driver income study, which led to the first national vehicle cap on ridesharing companies, as well as the first national requirements on minimum driver pay for over 180,000 drivers.
- Applied regression and random forest models to predict taxi volume and k-means clustering to improve 311 complaint categories for taxis.

Urban Upbound Long Island City, NY
Data & Evaluation Manager *June 2015 - June 2016*

- Oversaw and managed six databases to track outcomes and reporting to assist low-income New Yorkers in gaining access to banking services.
- Developed evaluation protocols and analytical tools for testing program models.
- Aided with studies on financial stress as a predictor of counseling outcomes.
- Provided quantitative and qualitative assistance for the Healthy Aging Study, a qualitative report recommending resource upgrades for senior citizens in Far Rockaway.

Urban Upbound Long Island City, NY
Monitoring & Evaluation Assistant *July 2014 - May 2015*

- Designed and administered surveys on financial counseling outcomes.
- Developed evaluation protocols for testing efficacy of interventions for all programs.

EDUCATION

Macaulay Honors College at CUNY-Hunter New York, NY
Master of Science: Applied Social Research and Statistics *May 2014*

Macaulay Honors College at CUNY-Hunter New York, NY
Bachelor of Arts: Sociology *May 2013*

TECHNICAL PROJECTS

MatKings | Front/Back End Development | 08/2024 | https://github.com/datafaust/bjj-app

- Developed a responsive platform built on a React/SQL/Node/Docker stack, enabling jiu jitsu instructors to advertise services and manage private lessons, shifting from word-of-mouth to digital.
- Implemented customized dashboards for instructors and students to manage bookings and schedules, enhancing efficiency and user experience.
- Integrated Stripe for secure payment processing and Firebase for user authentication, ensuring seamless transactions and login.
- Utilized Docker for consistent development environments and streamlined deployment and leveraged Tailwind CSS for a consistent and responsive design.

FausTTech | Technology Consulting | 08/2021 | https://fausttech.co/

- Developed and deployed full stack web applications using modern frameworks such as React, Node.js, and Express, delivering customized solutions for clients in various industries.
- Designed and implemented RESTful APIs to enable seamless integration between front-end interfaces and backend systems, ensuring robust and scalable application architecture.
- Showcased a portfolio of diverse projects on the company website, highlighting expertise in responsive design, database management, and cloud deployment, while actively driving client engagement and business growth.

PUBLICATIONS

- An Earnings Standard for New York City's App-Based Drivers: Economic Analysis and Policy Assessment, *July 2018.*
- Healthy Aging in Far Rockaway: Findings from the Urban Upbound Healthy Aging Initiative, *April 2015.*
- Hybrid Strategies: Allocating Involvement in the Digital Age, *Society for the Study of Symbolic Interaction*, *June 2015.*