Kenneth Hahn

+1(951) 207-2607 hahnkenneth@berkeley.edu LinkedIn Github Portfolio

EDUCATION

University of California, Berkeley Expected: August 2025

Masters of Information and Data Science | 4.0 GPA

Relevant Coursework: Applied Machine Learning, Fundamentals of Data Engineering, Statistics for Data Science, Data Science Programming, Research Design and Applications for Data and Analysis

University of California, Berkeley May 2020

B.S. Chemical Engineering, Minor in Mechanical Engineering | 3.6 GPA

SKILLS

Programming Languages: SQL (MySQL, Postgres), Python (NumPy, Pandas, Matplotlib, Seaborn, Scikit-Learn), R, NoSQL (Neo4j), MATLAB, HTML
Data Visualization and Analysis: JMP, Tableau
Other Tools: AWS, Github, LaTeX, COMSOL, Visual Studio, RStudio

PROJECTS

Sustainable Bay Area Delivery Service August 2024

- Created a Neo4j NoSQL Graph Database of BART, customer, and store locations within the Bay Area.
- Determined relationships between nodes by utilizing Google Maps Direction API to determine travel duration between two given nodes via BART or e-bike.
- Used Louvain Modularity and Dijkstra's shortest path algorithms to determine optimal new store locations to be within 40 minutes of any given customer.

Regression Analysis of Blood Pressure on National Health July 2024

- Analyzed data in R, collected by National Health and Examination Survey, to create linear regressions on factors such as body weight, smoking causes, and physical activity.
- Developed a linear regression model, evaluating the performance and assumptions through hypothesis testing.

EXPERIENCE

Tesla **Fremont, California**

Battery Pack Process Engineer February 2022 – July 2024

- Created process for a new subassembly line via Postman API calls to parallelize workload and increase production of Model S/X battery packs by 33%.
- Decreased electrical resistances in battery pack to assist in safe operation of the vehicle, resulting in a statistical reduction of 57,430 defects per million to 98 defects per million.
- Utilized A/B testing to determine supplier quality issues with fasteners, leading to a 20% yield increase.
- Improved leak test processes implementing statistical process controls, reducing the number of off-roaded vehicles and saving the company $800K/year.
- Developed Tableau Dashboards to monitor critical equipment KPIs for the new Cybertruck launch.

Procter and Gamble **Sacramento, California**

Hydrogenation Fatty Alcohol Manufacturing Engineer August 2020 - February 2022

- Experimented and executed an increase to site throughput of Fatty Alcohol Product by 1%, resulting a site revenue gain of approximately $3M/year, without the use of capital spending.
- Implemented process control strategies to tune a pressure control valve to allow higher pressures in the reactors. This led to a 0.2% increase in reaction completions and overall throughput ($600K/year improvement).
- Decreased Unplanned Downtime by 5% (438 hours) through identification/mitigation of top contributors with Pareto Principle.
- Saved the business $120K/year by optimizing flow rates of caustic through experimental tests.
- Eliminated 10% of nuisance alarms with MATLAB, collecting occurrence data and determining root cause for each.