Kenneth Hahn

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EDUCATION

University of California, Berkeley Expected: August 2025
Master of Information and Data Science | 4.0 GPA

Relevant Coursework: Machine Learning at Scale, Natural Language Processing with Deep Learning, Machine Learning Systems Engineering, 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 (Tensorflow, Keras, XGBoost, NumPy, Pandas, Matplotlib, Seaborn, Scikit-Learn), R, NoSQL (Neo4j), MATLAB, HTML
Data Visualization and Analysis: JMP, Tableau, Dash
Other Tools: Apache Hadoop, Apache Spark, Kubernetes, AWS, Git/Github, LaTeX, COMSOL, Visual Studio, RStudio

PROJECTS

NASA Exoplanet Detection Classifier December 2024

- Developed a machine learning classifier to identify exoplanets from Kepler Space Telescope observations.
- Evaluated multiple models, including Neural Networks, Random Forests, and Logistic Regression, updating decision thresholds to achieve 90% precision and recall.
- Integrated domain knowledge (e.g. gravitational acceleration and heat flux) to enhance feature engineering.

Bank Transaction Classifier Dash App November 2024

- Trained a custom ensemble model utilizing Logistic Regression, Support Vector Classifier, and Neural Network to categorize bank transactions from various institutions.
- Utilized the trained model and preprocessing Pipeline to develop a Dash app to upload transaction data, visualize categorization, predict new categories, and train a new model.

Sustainable Bay Area Delivery Service August 2024

- Created a Neo4j NoSQL Graph Database of BART, customer, and store locations within the Bay Area.
- Determined travel duration between nodes by utilizing Google Maps Direction API.
- Used Louvain Modularity and Dijkstra's shortest path to find new store locations within 40 minutes of any customer.

EXPERIENCE

Tesla **Fremont, California**
Battery Pack Process Engineer February 2022 – June 2024

- Created process for a new subassembly line via Postman API to parallelize workload and increase production of Model S/X battery packs by 33%.
- Decreased electrical resistances in battery pack, utilizing MySQL databases and A/B testing, to assist in safe operation of the vehicle, resulting in a statistical reduction of 57,430 defects per million to 98 defects per million.
- Improved leak test processes implementing statistical process controls, reducing the number of off-roaded vehicles and saving the company $1M/year.
- Developed Tableau Dashboards to monitor critical equipment KPIs for the new Cybertruck battery 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 Downtime by 5% (438 hours) through identification/mitigation of top contributors with Pareto Principle.
- Eliminated 10% of nuisance alarms with MATLAB, collecting occurrence data and determining root cause for each.