

# HALEY FARBER

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## EDUCATION

**University of California, Berkeley - Master of Information and Data Science (GPA 3.96)** 2021

Courses: Python Programming, Data Engineering, Machine Learning, Data Visualization, Experiments and Causal Inference, Natural Language Processing with Deep Learning, Statistics

**University of California, Berkeley - Bachelor of Arts in Economics *High Distinction* (GPA 3.85)** 2020

## DATA SKILLS AND TOOLS

- Languages: Python, R, SQL
- Machine Learning/Deep Learning: linear and logistic regressions, decision trees, k-means clustering, principal component analysis (PCA), neural networks
- Data Tools: AWS: (Redshift, S3, lambda, SageMaker, FeatureStore), Scikit-learn, TensorFlow, Airflow, Git, Tableau, Kibana

## WORK EXPERIENCE

**Data Scientist** June 2022 - Present

**Associate Data Scientist** 2021 - June 2022

Urgently, Working Remotely in CA

- Built and trained a dynamic pricing model that decreases the need for human intervention in assigning roadside assistance jobs by 2% through offering the market price based on factors such as a job's service type, location, and associated roadside partner. Model is hosted on AWS.
- Maintained a provider ranking model hosted on AWS that decreases the assignment time of service providers to a roadside assistance job by determining which providers are most likely to complete the job. Implemented a new lambda function that decreased the call time for 1000 providers by 2%. Scheduled the next iteration of the model using Airflow to automatically retrain the model periodically.
- Developed the firm's first real-time dashboards of at-risk roadside assistance jobs in Kibana for various customer service representative groups, increasing agents' efficiency and leading to a decrease in the cost of providing services.
- Forecasted the number of manually assigned roadside assistance jobs for one quarter, reducing the residuals of the current forecasts by 60% using seasonal decomposition, allowing for better staffing of on-call roadside assistance agents and planned budget.
- Assessed and advised numerous of the firm's initiatives and experiments through A/B testing to determine their impacts and if they were statistically significant.

**Financial Analyst Intern** Summer 2019

ARUP San Francisco, CA

- Developed a real-time dashboard of 12 metrics using Excel, Power BI, and SQL to track the financial health of engineering projects and offices, which helped lead to millions in cash savings by early identification of over-budget projects and outstanding invoices.
- Conveyed financial insights to engineering project managers and discussed how to improve the financial health of their projects using my dashboard.

## RESEARCH/ACADEMIC PROJECTS

- **Capstone - White Blood Cell Classifier:** Used deep learning to classify types of white blood cells in blood smear slide images to aid in acute myeloid leukemia (AML) diagnosis and research. Utilized ResNet, Xception, and YOLOv5 models. Website: <https://www.whitebloodcellclassifier.com/>
- **Twitter Bot Detection:** Utilized CNN, BERT, and DistilBERT using PyTorch and Hugging Face to classify if a tweet was written by a bot or human. Used LIME to discover words and phrases that indicate if a tweet was written by a bot.
- **Effect of Plus-Sized Models on Purchase Intent:** Experiment conducted with analysis in R and regressions to determine if viewing plus-size models instead of size 0-4 models increases a woman's likelihood of purchasing clothing.

## ADDITIONAL SKILLS

- Language: Conversational in Spanish - Speaking and Writing Proficiency.