

PROFILE

Data scientist currently working in healthcare analytics. Currently focused on patient personalization in the retail pharmacy setting. Experience in campaign and experiment development and monitoring as well as uplift modeling.

PROFESSIONAL EXPERIENCE

Data Scientist

Jun – Aug 2022; Jan 2023 – Present

CVS Health · Retail Pharmacy Consumer Analytics

- Developed tactics for immunization outreach efforts to drive 36M Flu and 19M Covid vaccinations.
- Conducted exploratory data analysis on patient immunization and retail data to propose five outreach tactics, including verbiage experiments.
- Authored presentations on analytics sizing, modeling, and analysis projects for data science and business stakeholders.
- Collaborated weekly with data engineers and business partners to ensure quality campaign measurements.
- Monitored performance of 29 past and ongoing immunization campaigns daily, with a primary focus on A/B testing for outreach tactics.
- Created, updated, and maintained internal technical and non-technical onboarding and model deployment documentation.
- Developed a refreshed Flu uplift model using LightGBM to prioritize patient SMS outreach, improving F1 score year-over-year from 0.739 to 0.893.
- Developed measurement automation standards, reducing measurement reporting efforts by up to 50%.

Biostatistics Research Intern

Jun – Aug 2021

St. Jude Children's Research Hospital

- Wrangled pediatric oncology patient health records to visualize several average temporal trends in patient BMI based on presence versus absence of bacteria species pair.
- Implemented a linear mixed-effects model to identify 3 bacteria species pairs correlated with elevated post-treatment BMI.
- Conducted hypothesis testing and presented results in a research seminar and wrote a manuscript detailing project methods and discussion.

Research Assistant

Aug 2018 – May 2020

Computational Medicine and Informatics Collaboratory

- Wrote scripts to extract critical care telemedicine data to analyze failure rates and temporal differences between noninvasive ventilation strategies of 10K patients.
- Conducted subgroup analysis to identify patient personas and generated sankey diagrams to visualize 9 patient subgroup outcomes.
- Applied logistic regression to show that NIPPV patients have an increase of 16.8% in mortality compared to HFNI patients, who carry a 6.6% increase in mortality.

TECHNICAL SKILLS

Languages Python (pandas, NumPy, scikit-learn, PySpark), SQL, R

Data Science Hypothesis Testing, Linear/Logistic Regression, Random Forest, Uplift Modeling

Tools Git, Jupyter, Databricks, Airflow, Snowflake, PowerPoint, Excel

EDUCATION

University of Pennsylvania

Master of Computer and Information Technology

University of Arizona

Bachelor of Arts (with Honors)