

PROFILE

Data scientist with 3+ years of experience driving patient outcomes through advanced analytics. Demonstrated track record of improving campaign performance and automating data workflows. Experienced in translating complex analyses into actionable business strategies.

PROFESSIONAL EXPERIENCE

Data Scientist

Jan 2023 – Present

CVS Health · Immunization Outreach

- Collected, organized, and interpreted large-scale retail pharmacy data to support strategic immunization outreach efforts, including campaigns that delivered 36M Flu and 19M COVID vaccinations.
- Applied LightGBM to develop and optimize uplift models, improving year-over-year F1 score from 0.739 to 0.893.
- Collaborated cross-functionally with data engineers and business stakeholders to define project roadmaps, ensuring alignment of campaign strategies and data infrastructure.
- Led exploratory data analysis using Python and SQL to identify 5 high-impact outreach tactics, resulting in 3x improvement in patient vaccination rates.
- Spearheaded the automation of measurement and reporting workflows, reducing manual reporting efforts by up to 50%.
- Drove execution of data exploration and campaign monitoring with fast iteration to maximize impact, continuously refining solutions based on A/B testing.
- Built consensus among partners through regular presentations, simplifying complex analytical findings for a wide range of audiences, from technical teams to business leadership.

Data Science Intern

Jun – Aug 2022

CVS Health · Immunization Outreach

- Developed time of day uplift model to prioritize patients for Flu SMS outreach.
- Learned about patient personalization efforts in the retail pharmacy setting.

Biostatistics Research Intern

Jun – Aug 2021

St. Jude Children's Research Hospital · Department of Biostatistics

- 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.

Undergraduate Research Assistant

Aug 2018 – May 2020

University of Arizona · Computational Medicine and Informatics Collaboratory

- Extracted critical care telemedicine data to analyze failure rates and temporal differences between noninvasive ventilation strategies of 10K patients.
- 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, SQL, R

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

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

EDUCATION

University of Pennsylvania

Master of Computer and Information Technology

University of Arizona

Bachelor of Arts (with Honors)