

MATIAS BERRETTA

Brooklyn, NY 11237

440-935-9201 — matiasberretta93@gmail.com — <https://mberrett.github.io/>

PERSONAL STATEMENT

As a data scientist with over five years of experience across healthcare and technology sectors, I have a proven track record of driving impactful business decisions through advanced machine learning and predictive analytics. At Ophelia, I increased patient conversions for paid social campaigns by 40% through ML-derived events for optimized audience targeting. At Healthfirst, I won the Journey2Greatness Analytics Award for my Diabetes Preventable Admissions model, which the company uses for stratified outreach to its entire Diabetic population. In grad school I developed a novel means of imputation for recurrent neural networks working together with Harvard Medical School to serve the Multiple Sclerosis population.

With a solid foundation in tools like Python, SQL, and cloud services, alongside experience managing data pipelines, predictive modeling, and cross-functional teams, I bring a unique blend of technical skills and strategic thinking. I am passionate about using data to solve complex challenges, and I am excited to bring this expertise to a forward-thinking organization where I can continue to make a tangible impact.

EXPERIENCE

Data Scientist

February 2022 — September 2024

Ophelia Health

- Improved patient conversions for paid social by 40% via ML derived events for audience targeting optimization; built predictive model that outperformed regular conversion events, bringing cost per patient in A/B test down by 46% from ~\$3600 to ~\$1900
- Improved clinical utilization via ML triggered CRM comms: built cancellation risk model to trigger text reminder with the option to reschedule for patients who were unlikely to attend their clinical appointment, improving the high risk cohort's utilization by 15%.
- Set up company-wide Looker reporting for Marketing and Predictive Modeling. Wrote weekly exec-level marketing report.
- Built and maintained robust analytics warehouse via DBT and Github; Standardized metric definitions as part of the data council.
- Managed social media agency and platform reps; tested new channels, campaigns, ad creatives; wrote and recorded music for ads
- Optimized marketing spend by acquisition channel based on dynamic operational constraints grounded in statistical models.

Data Scientist

June 2019 — February 2022

Healthfirst

- Saved \$300k in third party vendor contracts by bringing churn modeling for Medicare voluntary disenrollment in-house (AUC+20%)
- Won Healthfirst's Analytics Award after developing a Diabetes Preventable Admissions model, which the org uses for stratified outreach to its entire Diabetic population (200k+ folks).
- Key player in HF rising to a 4-star Medicare rating by reducing Medicare voluntary disenrollment through risk stratified outreach
- Developed first Deep Learning use case at HF by implementing Recurrent Neural Network for Preventable Inpatient Admissions
- Developed NLP Topic Modeling Module to help Contact Center Operations understand why members call in order to drive strategy
- Reduced time needed for feature-engineering by 75% by teaching team GitHub and cataloging all known features into repositories

Data Analytics Graduate Assistant

August 2018 — May 2019

Fordham University and Harvard Medical School

- Built customized predictive models to help doctors at Harvard prescribe the right treatment for patients with multiple sclerosis
- Developed a new, intelligent method of imputation for missing values in multivariate time series called dynamic fill
- Contributed a new variation on GRU called GRU-DF, which incorporates dynamic fill into GRU's training operation

Technical Solutions Consultant Intern

June 2018 — August 2018

Google Inc. (G-Tech)

- Developed ticket-theming tool to quickly surface trends for G-Tech services such as Ad Words using Natural Language Processing
- Obviated ticket misclassification issues and increased processing speed and quality for Product Operations Managers
- Presented project to Vice President of G-tech

Data Analytics Graduate Assistant

August 2017 — May 2018

Wireless Sensor Data Mining (WISDM) Lab at Fordham University

- Advised software engineers in the lab on implementation of machine learning and natural language processing models
- Web-scraped and parsed through the dark net to collect training data for terroristic threat classifier (approved by the FBI)

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EDUCATION

M.S. in Data Analytics

Fordham University GSAS, New York, New York

Expected Graduation May 23, 2019

GPA: 3.96

B.A. in Psychology and Creative Writing

Oberlin College, Oberlin, Ohio

Graduated May 23, 2016

GPA: 3.69

RESEARCH

GRU-DF: A Temporal Model with Dynamic Imputation for Missing Target Values in Longitudinal Patient Data

Accepted at ICHI 2020: IEEE International Conference on Healthcare Informatics, one of the top conferences in biomedical and medical informatics, with a ~30% acceptance rate and a double-blind peer-review process

SKILLS

PROGRAMMING LANGUAGES AND TECHNOLOGIES

Python (Pandas, NumPy, TensorFlow, Keras, PySpark, Sklearn, Matplotlib, Seaborn, XGBoost), Jupyter Notebook, R (ggplot2), R-Studio, Standard SQL, PostgreSQL, BigQuery, DBT, Looker, Tableau, Excel, AWS Cloud Services, Linux, Git, Spark, Linux

LANGUAGES
Native Speaker in English, Spanish, and Portuguese. Conversational Proficiency in French. Basic Proficiency in Japanese.

OTHER INTERESTS

Songwriting and music production (<https://soundcloud.com/mati-berretta>), brazilian jiu jitsu