GEORGE J.J.T.A. HAYWARD, Optimist

george@hayward.fyi • LinkedIn • HackerRank • Github • Tableau • Law • Finance • Stand-Up

Data Scientist - 10 yrs. experience & training. Impact at Meta & Google (SQL/Python/R/ML). Skilled orator. Mom worked as a bus monitor; Dad was disabled. They taught optimism, work ethic, & creativity.

EXPERIENCE

Meta, Messenger   **New York, NY**
Senior Data Scientist, Product Analytics   *2019 - present*

- Created first-of-its-kind in-production machine learning anomaly detection system, "*Battery Beloved.*" Led project in Meta's Machine Learning Accelerator tracking battery drain daily for Android Messenger users. Released internal Wiki, "*Step-By-Step Guide to In-Production Machine Learning Model: Battery Beloved, as example (w/ XGBoost)*" explaining code line-by-line; roadmaps changed to implement model.
- Wrote "*Automate a Python Script at Facebook & More: A Visual Guide*" internal Wiki, providing "a foundation for **all Python engineers at Meta.**" Added to official "Python @ FB" training documentation. Reaction to this Wiki catalyzed creation of a Meta-wide automation solution, "*Bento Scheduled Notebooks.*"
- Created new disk pressure metric, *Weeks Till Full ("WTF)*" for all users of Instagram, Messenger, & Facebook App. Developed Orange/Yellow/Red zones for disk pressure as Meta builds end-to-end messaging encryption. Named data science owner for cross-functional team & the product manager's "go-to" data scientist.
- Developed first-of-its-kind Performance, Reliability, and Efficiency Quality user survey to connect perception to 'under-the-hood' app metrics, led power analysis, control flow, language editing, and won initial approval.
- Performed "*Full Outer Join*" stand-up set in virtual Horizon room (Oculus) showcasing metaverse capabilities.
- Coached candidates through complex Meta data science interview process with a focus on increasing diversity.
- Led development, testing, & operationalization of new topline battery efficiency metric for 1.2 billion Android users tied directly to user experience via session-retention analysis. Validated session data against user perception via an international survey. Developed Red/Yellow/Green drain levels through statistical analysis.
- Created equation determining US iOS messaging primacy. Internally published "astonishing" research.
- Led text-based NLP analysis of 1- & 2-star Messenger reviews in Apple's App Store & Google's Play Store.
- Provided statistical analysis in R unblocking an entire engineering team by sizing (95% CI) the impact of an imbalance on a key metric in the A/B test. This enabled the team to ship the product to 165 million people.
- Directed 20+ person team in 2020 Facebook Hack-a-thon on racial equality making PoliceReformTracker.com.

Hayward Data Science (ghayward.github.io)   **New York, NY**
Data Scientist & Founder   *2019 - present*

- Led dispensary analysis for publicly-traded cannabis holding firm; found 7 key revenue predictors from 3.1k via backward elimination regression; predicted rev. to within $80k via XGBoost; segmented via K-Means clustering.
- Created content-based recommendation Python script via count vectorizers for SKU tags & cosine similarity.

Google, Area120, Tailor (Fashion Tech Startup Within Google)   **San Francisco, CA**
Data Scientist (contract)   *2018 - 2019*

- Built team's first predictive model for customer lifetime value. Analyzed 200k+ users via log. regressions & lin. optimizations in R & Google's Learn. Powerhouse; automated GoogleSQL scripts to report & dashboard it.
- Created automated DAG workflow for hourly priority score ranking orders on price, target status, & wait time.

Hayward Motivational Comedy, Inc.   **San Francisco, CA; New York, NY; Los Angeles, CA; Tokyo, Japan**
Optimist & Stand-up Comedian   *2017-present*

- Featured at Daily Press (NY), 2x winner of Harlem Nights Paid-By-The-Bell; booked 4x at Flappers (LA).

DATA SCIENCE, COMMUNICATION SKILLS, & LEADERSHIP

- **Speeches:** Hold The Line, Talk to Em, The Good News, Not By Adversity, J. Smollett, Towards Data Science.
- **Analysis:** SQL (BigQuery, MS SQL Serv., MySQL), Python (pandas, scikit-learn, xgboost, sqlite, numpy, scipy, altair, os, yagmail, beautifulsoup), R, Tableau, Machine Learning, ETL, Google Analytics, AWS Lambda, Excel.
- **ML Projects:** Time Series, A/B Test, Clustering, NLP, Neural Network, Regression & Classification, Playlists.
- **HackerRank:** Python, Gold Level (★★★★★); SQL, Gold Level (★★★★★), Ranked #1 on Global Leaderboard.

INTERESTS

Chess, Gershwin, Notorious B.I.G., J. Dilla, Astrophysics, Fried chicken, Speeches, Stand-up, SQL, Running, Jazz, Happy.

EDUCATION

Codecademy, Data Science Path, *(~350 hours online) Python, Machine Learning, Statistics*		*2019*
Stanford University, JD/MBA in Comedy, *Stanford Law Review, Admitted to CA State Bar and NY State Bar*		*2018*
• Selected Courses: Optimization and Simulation Modeling; Measuring Impact in Practice; Data and Decisions		
New Organizing Institute, Data Bootcamp, *Political Campaign Data Management, VAN, GIS, SQL*		*2014*
Harvard College, B.A. in Government, *Black Students Association Political Action Chair*		*2011*