GEORGE HAYWARD, Esq.

Full Stack Data Scientist & Attorney

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EXPERIENCE

Hayward Data Science New York, NY
Full Stack Data Scientist & Founder *2022 - present*
- Built churn/conversion ML system for $8.5 million-backed and acquired startup (see client Letter of Reference).
- Launched Sound Recipe iOS App to back up Spotify playlists; masterminded all code, design, law, & marketing.
- Engineered Python recommendation system for a $1 million+ small business, improving its product suggestions.
- Wrote Python ETL script to detect misleading news, scraped Drudge Report daily for 4+ yrs. (97% uptime).
- Selected as a Mentor on both Peak Mentors and SharpestMinds; commended for "transformational advice."

Meta, Messenger New York, NY
Senior Data Scientist, Product Analytics *2019 - 2022*
- Promoted to Senior Data Scientist in 1 year, demonstrating exceptional performance.
- Built first-of-its-kind in-production ML anomaly detection system, "*Battery Beloved.*" Led project in Meta's Machine Learning Accelerator, automatically debugging battery drain. Saved 100's of engineer hrs. Published, "*Step-By-Step Guide to In-Production Machine Learning Model: Battery Beloved, as example (w/ XGBoost).*"
- Published "*Automate a Python Script at Facebook.*" Praised as: "a foundation for **all Python engineers at Meta.**" Added to "Python @ FB" training docs. Inspired Meta-wide solution, "*Bento Scheduled Notebooks.*"
- Devised and deployed new disk pressure metric, *Weeks Till Full ("WTF)*" for over 2 billion users (Instagram, Messenger, & Facebook App). Developed Orange/Yellow/Red zones for disk pressure in end-to-end message encryption. Named data science lead for cross-functional team & the product manager's "go-to" data scientist.
- Designed 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.
- 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. Developed Red/Yellow/Green drain levels.
- Led text-based NLP analysis of 1- & 2-star Messenger reviews in Apple's App Store & Google's Play Store.
- Unblocked an entire engineering team by sizing (95% Confidence Interval; statistical analysis in R) 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 users.

Google, Area120, Tailor (Fashion Tech Startup) San Francisco, CA
Data Scientist (contract) *2018 - 2019*
- Built team's first predictive model for customer lifetime value. Analyzed 200,000+ users via log. regressions & lin. optimizations in R & Google's Learn. Powerhouse; automated GoogleSQL scripts to report & dashboard it.
- Automated hourly order priority score ranking orders on revenue, user status, and time since placement.
- Instituted daily email e-commerce report updating team on purchase metrics and initiated tracking dashboard.
- Ran user first-purchase analysis finding that 80% of users, if they purchased, did so in their first 4 days in app.

Morgan Stanley New York, NY
Investment Banking Analyst, Public Finance *2011 - 2013*
- Created interest rate databases so team could access data with SQL queries instead of less-efficient Vlookups.
- Provided quantitative analysis and execution support on the following debt issuances and restructurings:
  - $1.32 billion, NJ Trans. Trust Fund Auth. (2011); $120 million, City of Nashville, TN (2012); $443 million, DC Water & Sewer Auth. (2012); $847 million, IL Met. Pier & Expo Auth. (2012).
- Provided credit and interest rate analysis and quantitative support on the following corporate debt issuances:
  - $94 million, US Steel Corp. (2012); $250 million, Alcoa Inc. (2012); $224 million, Con Edison (2012).

SKILLS

SQL (Ranked #1), Python, R, Swift, ML, XGBoost, ETL, AWS Lambda, Google Cloud, A/B Testing, Automation, Excel.

EDUCATION

Stanford University, JD/MBA, *Stanford Law Review, Admitted to CA State Bar and NY State Bar* *2014 - 2018*
Harvard College, B.A. in Government, *Black Students Association Political Action Chair* *2007 - 2011*