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 advanced churn/conversion prediction system for acquired ML startup (see client Letter of Reference).
- Launched Sound Recipe iOS App to back up Spotify playlists; masterminded all code, design, law, & marketing.
- Created Python recommendation system for a Shopify small business that improved 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.
- Created first-of-its-kind in-production ML anomaly detection system, "*Battery Beloved.*" Led project in Meta's Machine Learning Accelerator tracking battery drain for Android Messenger users. Published internal Wiki, "*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.*"
- 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.
- 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.
- 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.

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 200k+ 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.
- Developed daily email e-commerce report updating team on purchase metrics and created 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 for my team to 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 bn, NJ Trans. Trust Fund Auth. (2011); $120 mm, City of Nashville, TN (2012); $443 mm, DC Water & Sewer Auth. (2012); $847 mm, IL Met. Pier & Expo Auth. (2012).
- Provided credit and interest rate analysis and quantitative support on the following corporate debt issuances:
  - $94 mm, US Steel Corp. (2012); $250 mm, Alcoa Inc. (2012); $224 mm, Con Edison (2012).

SKILLS

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