

Juliette Wong

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PROFESSIONAL SUMMARY

NYC-based data analytics professional with 4+ years of experience optimizing enterprise analytics platforms with 2000+ global clients (5 million rows of data/day) at **Mastercard**. Skilled in SQL-based metric validation, building dashboards for performance and usage, querying Snowflake and Postgres to investigate data quality issues, and partnering cross-functionally to deliver insight. Currently pursuing the **Georgia Tech Online M.S. in Analytics** with hands-on experience in Python, R, and machine learning.

EXPERIENCE

Mastercard

New York, NY

Software Engineer, Quality II (Data Analytics & Quality)

Mar 2023-Feb 2026

- Wrote custom SQL queries with filters, splits, and CTEs to validate benchmarking metrics across 3 products, owning data quality and KPI accuracy while maintaining strict adherence to data privacy and regulatory compliance standards
- Built and monitored 4 Splunk and 2 Mixpanel dashboards to identify 30-day trends in performance and usage for 3 products, increased product usage by 15% by presenting pain points in product usage to senior business stakeholders
- Analyzed data in SQL and Excel to deliver insights about geographical adoption of new features for product managers
- Reduced reporting defects by 10% by proactively querying Snowflake and Postgres to resolve cross-database pipeline issues
- Performed root-cause analysis on KPI calculation anomalies for 15% of KPIs, wrote documentation for future safeguarding

Software Engineer, Quality I

Aug 2021-Feb 2023

- Maintained Splunk dashboards to analyze performance and exception patterns; presented recurring trends to product and engineering teams, informing roadmap prioritization and reducing client complaints by 30%
- Identified test scenarios and executed test plans to ensure smooth rollout of new features for Mastercard's business intelligence platform, validating pipelines for 2000+ clients' transaction, fraud, and digital payments data
- Owned platform deployments, leading user-acceptance testing and QA following app and schema updates to ensure reliability

EDUCATION

Georgia Institute of Technology

Remote

Master of Science in Computational Data Analytics (Part-Time)

Expected Dec 2026

GPA: 4.00/4.00

Relevant Coursework: High-Dimensional Data Analytics*, Data and Visual Analytics, Computational Data Analytics, Simulation

Carnegie Mellon University

Pittsburgh, PA

Bachelor of Science in Mathematical Sciences

May 2021

Concentration in Operations Research and Statistics, Minors in Human-Computer Interaction and Chinese Studies

GPA: 3.89/4.00, Dean's List: All Semesters

Relevant Coursework: Design of AI Products and Services, Interactive Data Science, Machine Learning, Statistical Graphics

PROJECTS

Noisy Data, Noisier Neighbors: Decoding Urban Noise in NYC's 311 Data

Team Project for CSE-6242: Data and Visual Analytics

Sept 2025-Nov 2025

- Analyzed 10 years (18+ mil rows) of NYC's 311 noise complaint data with Python and integrated secondary datasets to identify spatiotemporal trends and forecast future complaints using a tensor-based CP decomposition model approach
- Designed D3.js interactive data visualization dashboard featuring a choropleth map and 3 dynamic charts; ingested model-generated CSV forecasts to enable exploration of historical and predicted complaint patterns by time, neighborhood, and type

Discrete Flu Epidemic Transmission

Individual Project for ISYE-6644: Simulation

Nov 2024-Dec 2024

- Developed a discrete-time stochastic simulation in Python to model flu transmission in a 61-student classroom
- Performed scenario analysis on vaccination status and contact patterns, generating statistical analysis and data visualizations to evaluate epidemic length and total infection rates over 1000 simulated outbreaks

UFC Fight Prediction

Team Project for MGT-6203: Data Analytics in Business

Feb 2024-May 2024

- Led data cleaning and data manipulation (streaks, cumulative performance) of 20 years of UFC fight data in R; joined 10 years of pay-per-view (PPV) data to identify key factors influencing PPV sales using linear regression and feature selection

SKILLS

Programming: SQL, Python (numpy, pandas, scikit-learn, matplotlib), R (tidyverse), JavaScript (D3.js), basic HTML/CSS

Data Platforms & Observability: Snowflake, Postgres, SQL Server, Splunk, Mixpanel, Tableau

Analytics & Data: Model Evaluation, Data Cleaning, Data Validation, Exploratory Data Analysis, Dashboards & Reporting, Cross-Validation, Machine Learning (Regression, Classification, Clustering, Forecasting)

Other Tools: Git (Version Control), NUnit, Jenkins (CI/CD), Insomnia, LLM-tools/AI for brainstorming, Jira, Confluence