

# JESSICA DUONG

Data Analyst | Healthcare & Operations

New York City, New York

duong.t.jess@gmail.com • linkedin.com/in/jess-duong • github.com/jess-duong

## SUMMARY

Certified Data Analyst with 8 years of experience tracking KPIs, segmenting performance data, and presenting findings to leadership in high-stakes, regulated environments. Background as a Surgical Care Technician, Dental Assistant, and Educator built deep expertise in compliance workflows, sensitive data handling, and cross-functional communication.

## TECHNICAL SKILLS

**Languages & Tools:** SQL, PostgreSQL, Python (pandas, NumPy, scikit-learn), Tableau, Excel, Jupyter Notebook

**Analysis:** Data Cleaning & Wrangling, Customer Segmentation, Cohort Analysis, KPI Development, Regression Modeling, Clustering, Statistical Validation

**Visualization:** Tableau Dashboards, matplotlib, seaborn, Data Storytelling, Stakeholder Reporting

**Domain:** Healthcare Operations, Patient Data & Compliance, Workforce Planning, Clinical Workflows

## ANALYTICS PROJECTS

### Broadway Market & Tony Award Revenue Analysis | SQL, Excel | GitHub

- SQL analysis of 9 Broadway seasons confirmed Tony Award winners average \$243K higher weekly gross (paired t-test and Wilcoxon,  $p < 0.001$ )
- Identified seasonal revenue patterns and top-performing genres to guide marketing investment and scheduling decisions for producers and venue operators

### NYC Healthcare Access Equity Analysis | Python, pandas, NumPy, scikit-learn, matplotlib, seaborn, Jupyter | GitHub | Tableau

- Applied linear regression and K-means clustering across 2,368 census tracts to prove income, not facility access, drives NYC health disparities (The Bronx Paradox: highest facility rate, worst outcomes)
- Identified four distinct neighborhood health profiles; Cluster 3 communities (\$53K income, 14.8% diabetes) concentrated in South Bronx and Central Brooklyn, enabling targeted intervention recommendations

### Influenza Staffing Optimization | Excel, Tableau, Statistical Modeling, CDC & Census Data | GitHub | Tableau

- Built staffing model ( $R^2 = 0.88$ ) from 458 state-year observations revealing 65+ populations face 5.2x higher death rates and winter demand peaks 6.8x above summer baseline
- Delivered Tableau dashboard identifying CA, TX, and OH (-10,704) provider deficits with surplus states flagged for redistribution

### Instacart Customer Segmentation | Python, pandas, NumPy, matplotlib, seaborn | GitHub

- Cleaned and analyzed 32.4M records across 206K customers; built segmentation framework showing adults 56+ generate 79.5% of Tier-1 revenue despite being 40.5% of customers
- Identified high-income customers (\$120K+) as significantly under monetized, spending the same per order as middle-income shoppers, flagging upsell opportunity for premium and bulk offerings

### Rockbuster Revenue & Market Analysis | SQL, PostgreSQL, Tableau | GitHub | Tableau

- Wrote complex SQL (JOINS, CTEs, subqueries) across 15-table database to calculate CLV and prioritize markets across 108 countries
- Developed phased rollout strategy focusing on 3 Tier-1 markets (India, China, US) representing 40% of customer base

## PROFESSIONAL EXPERIENCE

### Reading Interventionist & 3rd Grade ELA Teacher

SVN Charter School | Kansas City, MO | 2024 – Present

- Contributed to school-wide ELA growth rated 'Target' (Missouri's highest category) by segmenting students across 3 grade levels by mastery level to design targeted interventions
- Track and report KPIs (MAP benchmarks, fluency rates, phonics mastery) to teachers, administrators, and parents

### English Teacher & Global Education Trainer

International Schools (Dulwich College, Concord Academy, English First) | Shanghai & Guangzhou, China | 2018 – 2024

- Designed performance tracking systems for student cohorts and presented data-driven strategy recommendations to school leadership
- Led cross-functional training programs and managed school-wide initiatives across faculty, administration, and community stakeholders

### Clinical Healthcare Professional

Baylor Scott & White | Austin, TX | 2017 – 2018

- Supported orthopedic, neurosurgery, and pediatric surgical teams; ensured operatory prep and patient documentation compliance
- Managed patient records, insurance coordination, and treatment documentation across high-volume clinical settings

## EDUCATION

Certificate in Data Analytics | CareerFoundry | February 2026

Bachelor of Arts | Texas State University, San Marcos, TX