

# CICI CHEN

Irvine, CA • (254) 315-2642 • [chencici0424@gmail.com](mailto:chencici0424@gmail.com)  
[LinkedIn.com/in/iamcici/](https://www.linkedin.com/in/iamcici/) • [Github.com/iamcici0424](https://github.com/iamcici0424) • [Project Portfolio](#)

## SUMMARY

Self-motivated, detail-oriented senior data analyst with 4.5 years of industry experience in data analytics, marketing & product growth, ad-tech, and Finance at big tech firms. Demonstrated problem-solving and cross-team communications in turning ambiguous inquiries into concrete solutions. Led new hires to track challenges and improvements

## SKILLS

- **Programming:** SQL(joins, lags, subqueries, ctes, etc.), R(ggplot2, dplyr, glmnet, shiny, etc.), Excel (pivot table, vlookup), Python(matplotlib, numpy, pandas in Jupyter), SAS(Certified in Advanced/Statistical Business Analyst)
- **Tools:** Tableau, Google Studio, Looker, Power BI, Mode, Amplitude, Comscore, Airflow, Redshift, Athena, S3, DBT
- **Statistics:** Hypothesis Testing, A/B Testing, Sampling methods, Experimental Design, ANOVA
- **Machine Learning:** Regression, Decision Tree, Random Forest, PCA, SVM, KNN, Clustering, Regularization

## EXPERIENCE

### Amazon.com, Inc., Amazon Web Services

Remote, CA

#### Business Intelligence Engineer II, Infra Supply Chain Automation

1/2022 – Present

- Led and owned 3+ impactful BI reports across 400+ people org, drove supply-demand stability, resources delivery, and dived root causes for outages to improve cost efficiency in 125+ AWS data centers
- Collaborated with 10+ non-tech stakeholders, explored warehouse to gather appropriate source tables, translated ambiguous business questions into concise SQL queries, and visualized KPIs with clean tooltips in Tableau reports
- Optimized existing 40+ dashboards by writing reproducible codes and refining outdated logic in ETLs, designed self-served customizations and automation, and created a centralized wiki widely adopted by other teams
- Trained 3+ new hires, built the team to support senior leadership, and consistently exceeded expectations in reviews

### SchoolCare, Inc., formerly CareDox

New York, NY

#### Data Analyst, Product Insights in healthcare industry

6/2020 – 12/2021

- Attracted ~15% more clients by analyzing 2B+ data in EHR platform, accessed Covid-19 dataset to diagnose long-term risk trends, and researched social and mental health reasons linked to chronic conditions
- Improved ~18% SQL queries efficiency, obtained ~26% more sales via HubSpot A/B testing and ad-hoc analysis, and translated media survey into lasting school partnerships through acquisition, engagement, and retention funnels

## PROJECTS

### Interactive Visualization: Resources Awareness Metrics and Goals Tracking @AWS

- Consolidated 7+ tables using SQL, defined 6+ key metrics to evaluate demand and supply performance including launch timeline by phases, on-time v.s. late rates, and rolling comparisons against the goal in report automation
- Increased resource coverage from 42% to 99% (>95% target), unblocked constraints by identifying non-compliance data and informing owners for prompt resolutions, and facilitated smooth progress
- Sliced complex concepts into simple layers with clear diagrams, proactively highlighted missing components, and ensured scalability for future iterations, supporting goal tracking with 100+ DAUs(Daily Active Users) across the org

### Abnormality Detection: BI Solution for Metric-Based Threshold Alarming @AWS

- Captured 8+ large-scale abnormal fluctuations by monitoring hourly production variance, determined appropriate threshold and severity from backtesting, and played a major role in influencing software-based alerts in 2023
- Reduced ~15% downtime by vending last-valid values for science models, addressed frequent outage errors, detected missing values, source switches, and outliers in upstream services, and improved data reliability

### Machine Learning Algorithm: Decision Tree Classification Application in Healthcare @SchoolCare

- Achieved a 94% accuracy in pre-classifying students' health conditions into Green/Yellow/Red risk zones using R, and initiated a critical step toward future automation based on given symptoms
- Cut review time by 1 week per month on average through pilot tests, validated high-risk students by training medical professionals to use model-based spreadsheets, and simplified the manual categorization

### Marketing Mix/Multi-Touch Attribution Models(MMM): Advertising Response Measurement in AdTech

- Built 6+ models using 500,000+ data by evaluating advertising channels(emails, social media, display, etc.) along with advertising effects to drive user engagement and user LTV (lifetime value) from performance marketing
- Designed R Shiny App to visualize the results of advertising testing methods such as hold-out and last-touch tests

## EDUCATION

Columbia University – M.A. in Statistics | GPA: 3.70/4.00 – New York, NY

12/2019

Baylor University – B.B.A. in Marketing | Dean's Honor List | Cum Laude | GPA: 3.88/4.00 – Waco, TX

12/2017