## Cici Chen

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• LinkedIn.com/in/iamcici/ • Github.com/iamcici0424 • Project Portfolio

#### **EDUCATION**

## Columbia University - New York, NY

12/2019

Master of Arts in Statistics | GPA: 3.7/4.0

Courses: Advanced Data Analysis (Grader), Applied Data Science(A+), Linear Regression, Sample Survey

## Baylor University - Waco, TX

12/2017

Bachelor of Business Administration in Marketing | Dean's Honor List / Cum Laude | GPA: 3.88/4.00

Courses: Digital Marketing, Marketing Research/Analytics, Consumer Behavior, Leadership and Engagement

#### **SKILLS**

- Programming/Tools: SQL, R (ggplot2, dplyr, glmnet, shiny, etc.), Excel (Pivot Table, Vlookup), SPSS, Python (Matplotlib, NumPy, pandas, etc.), Tableau, SAS, Jira, Asana, Databricks
- Certifications: Google Analytics, CITI Researcher, SAS Advanced/Statistical Business Analyst, Hootsuite Platform
- Machine Learning: KNN, LDA/QDA, Decision Tree, Random Forest, Bagging, Boosting, PCA, SVM, Neural Network

#### **EXPERIENCE**

**SchoolCare**, formerly CareDox Data Analyst, Product Insights

New York, NY 06/2020 - Present

- Maintained key metrics from the Electronic Health Record platform, improved the production database time efficiency by ~18% with revised SQL queries, created the interactive dashboards in Tableau
- Analyzed ~350+ tables and ~2B+ healthcare data with R, tracked Covid-19 dataset daily to diagnose risk and trends, researched the social reasons behind chronic diseases from nurse notes, and reported data-driven recommendations
- Prioritized team goals and attracted new deals by evaluating HubSpot dataset, examining business ratios along with sales velocity, and conducting the statistical analysis to build long-term school partnerships in our marketing funnels

## **Columbia University**

New York, NY

Associate/Data Science Tutor, Quantitative Methods in the Social Science Program

- 09/2019 06/2020
- Provided grading rubric, graded 150+ student assignments per week, and organized the results in Excel
- Debugged issues in R for up to 20+ graduate students weekly and assisted them with data-related topics including regression, hypothesis testing, sampling methods, and some machine learning algorithms
- Received a high rating from the students through introducing user-friendly programming, summarizing pros/cons of different testing methods, providing one-on-one coding support for the students who lack data backgrounds

# New Global Systems for Intelligence Transportation Management

Florence, KY 02/2018 - 05/2018

Marketing and Accounting Assistant

- Increased reach and conversion by 10% through 4Ps, A/B Testing, SMART/SWOT Analysis, and Search Engine Optimization, adjusted business strategies, and identified potential opportunities with market insights in weekly reports
- Evaluated 15+ campaigns of digital marketing data, assessed the records of 10+ KPIs from the past campaigns to drive new acquisition, integrated 4 proposals on traffic simulation software, and developed dashboards in CRM

## **PROJECTS**

## Marketing Mix/Multi-Touch Models: Advertising Response Measurement in AdTech

- Evaluated the effectiveness of different advertising channels such as emails, social media, display, and direct mails by building 6+ Marketing Mix Models (MMM)/Multi-Touch Attribution Modeling using 500,000+ data along with advertising effect to identify the cause-and-effect relationships between sales and customers' reactions
- Increased the interactive performance and application of the report by designing R Shiny App to visualize the results of advertising testing methods such as hold-out test and last-touch analysis

## Applied Data Science: Image Recognition With 10 Machine Learning Techniques

- Proceeded 70,000+ images with 'data.table', reduced the dimension from 28x28 to 7x7, and classified the images by 10 models such as Neural Network, Logistic Regression with Lasso, KNN and Random Forest with 80+% accuracy
- Defined a score function to evaluate classification models based on the proportion of training set, computing time, and test error, then summarized model performances under different circumstances in dashboards

## Data Visualization: Workforce Strategies Evaluation with R, Tableau

- Extracted 100,000+ data from 10+ tables, visualized ER Diagram with 'datamodelr' to display the relationships among employees' information, and animated the story with dashboards for better interpretation and presentation
- Explored the association between gender and their average rate, observed the discipline of the hiring season, predicted the new quota for sales by linear regression, and deliciated those results by Tableau and 'ggplot2' graphs