

# Daniel Kwon

Data Science / Analytics Professional

## CONTACT

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## EDUCATION

**Northwestern University**  
B.S. | Industrial Engineering

**UCLA**  
M.S. | Applied Statistics  
(In Progress)  
Estimated completion in 2023

## PROGRAMMING LANGUAGES

|               |  |
|---------------|--|
| <b>R</b>      | <div><div></div><div></div><div></div><div></div><div></div></div> |
| <b>Python</b> | <div><div></div><div></div><div></div><div></div><div></div></div> |
| <b>SQL</b>    | <div><div></div><div></div><div></div><div></div><div></div></div> |

## SKILLS

Regression / Classification  
Tree-based Models  
Time Series Forecasting  
Clustering (K-means)  
A/B Testing  
Design of Experiments  
Data Visualization  
Financial Analysis

## EXPERIENCE

### **Ruggable**

Senior Manager, Marketing Data Science  
August 2021 - Present  
Manager, Marketing Data Science  
September 2020 - August 2021

- Developed bundled offers using association rules mining to identify pairs of rug designs that would lead to the most lift in sales, which led to an increase in bundled purchases of ~10X higher than human-generated bundles
- Created framework to measure incremental impact of new product launches and identify cannibalization within the existing catalog using ARIMA forecasting on interrupted time series
- Developed uplift model to measure the incremental improvements to a customer's conversion probability if given a discount offer; used to create retention email campaigns with a variable discount offer
- Led effort to conduct experiments with treatment groups defined by geographic boundaries when traditional A/B testing is not possible; used Difference-in-Differences technique to measure impacts of marketing campaigns primarily viewed on mobile devices

### **Hulu**

Advanced Analytics Manager  
January 2019 - September 2020  
Senior Analyst  
March 2017 - January 2019

- Led development of a content valuation framework to quantify the retention/acquisition benefits of a given title, which influenced Hulu's approach to content valuation
- Developed approach to adjusting engagement forecasts by adjusting for "inflation" among older titles, thereby reducing error in existing production model by 40%
- Developed financial forecasts and models which led to the decision to reduce Hulu's entry level price from \$7.99 to \$5.99, resulting in a sign-up lift of 20-30% and incremental growth in net margins
- Developed engagement forecasts for Hulu's prospective international expansion into LATAM and EMEA

### **Accenture**

Analytics Consultant | July 2014 - March 2017

- Developed churn models for major US telecom client to identify and proactively mitigate churn among at-risk subscribers
- Developed forecasting model used to create staffing schedules for app reviewers / moderators at a big tech client; daily MAPE of <5% allowed for better staffing and significantly reduced wait times
- Wrote ETL scripts to stitch data from several legacy databases for state government client