

# JISU BAEK

📍 New York, NY 10025 | ✉ [jb4563@columbia.edu](mailto:jb4563@columbia.edu) | ☎ (917) 603 - 3213 | 💻 [jisubaek](#) | 🏠 [jisubaek90.github.io](#)

## EDUCATION

**Columbia University**, New York

Expected May 2022

*M.S. in Applied Analytics*; GPA 4.05/4.30

- Capstone project: Marketing channel optimization and effectiveness evaluation using R for healthcare consulting

**Sungkyunkwan University**, Seoul, Korea

Aug 2015

*B.B.A. with an emphasis on Quantitative Methods*

- Dean's list with distinction, four-year full-tuition scholarship awarded for academic excellence
- Study-abroad: Beijing Language and Culture University (2011)

## CORE COMPETENCIES

- **Programming:** R
- **Database:** PostgreSQL, MySQL, pgAdmin, MongoDB, Elasticsearch, Neo4j
- **Version Control:** Git
- **Visualization:** Tableau Software, Power BI

## PROFESSIONAL EXPERIENCE

**Lotte Department Store**, Seoul, Korea

Jul 2015 – Nov 2020

*Data Analyst – Sales and Marketing (Female Clothing Section)*

- Performed a Principal Component Analysis (PCA) and market basket analysis to cluster customer segments
- Designed and implemented cross-selling promotion campaign by identifying a strong association between clothing customers and cosmetics customers, resulting in 5.7% sales growth
- Honored as Employee of the Year (2016) for outstanding performance in analytical marketing strategy

*Data Analyst – Task Force Project (Young Target Omni Channel)*

Aug 2016 – Dec 2017

- Redesigned the KPIs for each marketing funnel and cooperated cross-functionally with online marketing team
- Optimized a logistic regression model on conversion rate using R and SQL
- Developed interactive on/offline marketing campaign using beacon services, increasing on/offline sales by 50% within one month timeframe

*Data Analyst – Task Force Project (Female Fashion Merchandise)*

Nov 2015 – Aug 2016

- Collaborating with Merchandise team, automated and integrated quarterly KPI and market basket analysis reports and dashboards using real-time Tableau dashboard
- Deep-dived into customer data and customer purchasing patterns through cohort analysis with R and SQL
- Provided cross-merchandising strategy by combining female clothing and food, which increased the average time spent in-store; expanded total sales revenue of second floor by 400% compared to the previous year

## RELEVANT PROJECTS

**AirBnB**

Spring 2021

- Applied Random Forest algorithm with 10-fold cross validation to better predict the NYC accommodation price using R, resulting in  $R^2=0.94$  and a 0.175 of RMSE.
- Compared model performance of various machine learning algorithm and regression model to find the best model
- Identified the relationship between geographic location and accommodation price in New York

**Booking.com**

Summer 2021

- Managed hotel booking data and food delivery data and developed ETL pipeline using SQL
- Prototyped an application service combining hotel booking and food delivery service in Seoul Korea using Shiny
- Deployed the basic customer analytics and business insights in the application to attract more hotel and food delivery service providers

## HONORS

- Employee of the Year for Excellence in Performance, Lotte Department Store May 2016
- LTE Integrated Marketing Communication Strategy Competition, 1st Place, Korea Telecom Nov 2013
- Marketing Campaign Competition over Converting walk-ins to appointment, 1st Place, LG Jul 2013
- Marketing Communication Campaign Competition to increase brand awareness of Lenovo May 2013
- KT&G Asia Venture Start-up Idea Contest, 4th Place, The Korea Economic Daily Feb 2013