

KATIE CAO

DATA SCIENCE & ANALYTICS

CONTACT

✉ Lcao18@fordham.edu
☎ (814) 218-7569
🏠 New York, NY
🌐 [linkedin.com/in/katiecao](https://www.linkedin.com/in/katiecao)
🔗 github.com/katiecao1
🌐 katiecao1.github.io

PROFILE

Background in consulting with focus on building solutions using data analytics and behavioral economics to improve efficiencies and revenue.

EDUCATION

2019
FORDHAM UNIVERSITY [NEW YORK, NY]
Master of Science in Analytics
GPA: 3.80

2017
MERCYHURST UNIVERSITY [ERIE, PA]
Bachelor of Arts in Finance and Accounting
Summa Cum Laude

TECHNICAL SKILLS

- Statistics and Probability
- Machine Learning
- Natural Language Processing
- Data Visualization
- Database Management
- Python, R, SQL
- Pandas, Scikit-learn, NLTK

AWARDS

- First Prize – 2018 Fordham Consulting Case Competition
- Honorable Mention – 2019 Fordham Data Crunch Basketball March Madness Bracket Prediction

EXPERIENCE

JUL 2019 – SEP 2019 NEW YORK, NY

Data Scientist Intern | Zenon AI

- Developed customer segmentation tool using **Artificial Neural Network** and **XGBoost** algorithms with Python and Oracle MySQL to reduce the number of churners by **10%** for an online trading platform client
- Streamlined client's internal paperwork process by **30%** by building a **Natural Language Processing** tool using Python regular expressions that extract contract terms from sentences

MAR 2018 – JUL 2018 NEW YORK, NY

Senior Associate | Ideas42

- Received early promotion for outstanding work performance
- Led a team of two by providing technical guidance and engagement opportunities
- Provided regular reporting on project performance to leadership team and high-level executives
- Streamlined reporting process by **50%** by writing **VBA macros** to automate consolidation tasks

AUG 2017 – MAR 2018 NEW YORK, NY

Associate | Ideas42

- Performed both **qualitative and quantitative analyses** to evaluate business and management decisions using key metrics
- Coordinated with cross functional teams in the NY, Boston, DC, and San Francisco offices to build behavioral solutions based on evaluation results
- **Queried data** from internal and client's databases to perform ad hoc reporting

PROJECTS

College Basketball Bracket Prediction

- Engineered new features and applied **Random Forest**, **Logistic Regression** algorithms and **GridSearch** to predict 2019 NCAA Men's College Basketball Tournament bracket with **79%** accuracy and **0.53 log loss**

Employee Turnover Prediction – HR Analytics

- Performed **Exploratory Data Analysis** and built Random Forest and Gradient Boosting classifiers with **Cross Validation**, **tackling data imbalance using SMOTE** to predict employee attrition

Stock Portfolio Recommendation Using Sharpe Ratio

- Created a S&P 500 stock portfolio with a **7% risk-adjusted return** by using **pandas** and **Beautiful Soup** to scrape data from Yahoo Finance, calculating Sharpe Ratio, storing and querying it from a **PostgreSQL server**