

# ARYAN MISHRA

New York, NY

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## EDUCATION

### Columbia University

M.S. Business Analytics, GPA: 3.63/4.0

*Expected Dec 2022*

Courses: Machine Learning, Artificial Intelligence (Deep Learning), Intro to Product Management, Business Analytics, Data Analytics, Optimization Models & Methods, Probability Statistics & Simulation.

### Bocconi University

B.S. Economics, Management & Computer Science, GPA: 3.82/4.0

*Jul 2021*

Courses: Advanced Mathematics (Real Analysis, Linear Algebra, Multivariate Calculus), Advanced Statistical Methods, Computational Microeconomics, Data Structures & Algorithms, Econometrics, Numerical Optimization.

## RELEVANT EXPERIENCE

### Prudential Financial (Fortune 100 Insurance Company)

Newark, NJ

*Data Science Intern*

*May 2022 - Aug 2022*

- Developed a custom Next Best Action (NBA) model based on LSTM neural networks to recommend optimal actions for Prudential advisors during client interactions, resulting in a 59% lift in conversion rate and 17% lift in expected adjusted operating income (AOI).
- Analyzed and preprocessed +2M data points for exploratory data analysis, feature engineering, and subsequent model building using the Python data science stack (Pandas, NumPy, Keras, Scikit-learn, TensorFlow, statsmodels).
- Collaborated with data scientists and senior product managers to define key metrics and measurement frameworks for the NBA model to ensure a consistent evaluation structure.

### Ardian (Private Equity Firm with \$120Bn AUM)

New York, NY

*Data Scientist (Columbia Capstone Project)*

*Jan 2022 - May 2022*

- Built machine learning models to forecast one-month-ahead electricity price spikes using ERCOT, weather, and macroeconomic data, resulting in an estimated \$8M in cost savings for Ardian and its stakeholders.
- Optimized existing models by performing dimensionality/feature reduction, resulting in a maximum 43% improvement in model performance over existing Ardian models.
- Leveraged Power BI software to integrate backend model results with a front-end user interface dashboard, allowing stakeholders to review significant amounts of valuable information at a glance and increasing efficiency by 45%.

### Focus Project Europe (Spanish Ed-Tech Startup)

Madrid, ES

*Product Data Science Intern*

*Jun 2021 - Sep 2021*

- Led a project to construct a prototype grade prediction feature utilizing Logistic Regression & CART-based methods on Python.
- Forecasted academic performance with 95% accuracy to create prototype. Later scaled to a user base of 5000 students.
- Authored a white paper promoting prototype and later presented it to over 5 educational institutions across Europe.

### Bocconi University (Leading European University in the Social Sciences)

Milan, IT

*Research Assistant - Computer Vision*

*Jun 2020 - Dec 2020*

- Constructed and implemented convolutional neural network (CNN) models leveraging the Keras library on Python for object identification and image embedding.
- Built an in-house database comprising 100,000 scraped annotated images of various fashion brands for the Bocconi-Gucci Research Lab - thus creating a solid basis for current and future research on fashion industry.

## LANGUAGE AND SKILLS

- Programming: Python, R, SQL, MATLAB, JavaScript.
- Python Packages: NumPy, Pandas, Scikit-Learn, NLTK, statsmodels, Gensim, Beautiful Soup, Keras, NetworkX.
- Data Visualization: Tableau, Power BI, Matplotlib, ggplot2, Seaborn, Folium.
- Front-End Development & Cloud: HTML, CSS, Django, AWS SageMaker, Jira.
- Spoken Languages: Hindi (Native), Italian (Intermediate), French (Intermediate).

## ADDITIONAL INFORMATION

- Runner-Up Vodafone Italy "TOBi" Hackathon 2019 - optimized and enhanced Vodafone's chatbot using unsupervised machine learning algorithms. Subsequently endorsed by Vodafone on a national level.
- Project Leader at Bocconi Students for Innovation - led multiple (5+) pro-bono technical consultancy projects related to Business Intelligence, Sentiment Analysis, and Data Mining for startups based in Italy and Europe.