

# Edward Freedman

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## Education

### CORNELL UNIVERSITY

Master of Engineering (M.Eng.) in Operations Research and Information Engineering, Data Analytics concentration

Ithaca, NY

### CORNELL UNIVERSITY

Bachelor of Science (B.S.) in Operations Research and Engineering, minor in Computer Science

Ithaca, NY

## Experience

### PAYPAL

New York, NY

#### Decision Science Intern

Jun. 2022 – Aug. 2022

- Analyzed the impact of a U.S. PayPal merchants adding a Buy Now, Pay Later (BNPL) competitor to their website
- Implemented time series analysis methods in R to predict drops in PayPal purchase volume after a BNPL competitor addition using over 100 weeks of transaction data per merchant
- Used machine learning techniques to find similarity matches for over 4,000 merchants to use in causal impact modeling
- Created structured methodology using SQL to extract and organize relevant data from over 40 million daily transactions to expedite future analysis of non-US merchants by several weeks
- Provide PayPal's marketing and sales teams with budgeting strategy for establishing exclusive PayPal merchant partnerships to prevent future revenue losses due to BNPL competitors

### JOHNSON & JOHNSON

Ithaca, NY

#### Data Scientist (M.Eng. Project)

Jan. 2022 – May 2022

- Modeled patient referral patterns from general physicians to medical specialists for Uptravi and Opsumit prescriptions which generate over \$2.5 billion in annual revenue
- Utilized network analytics to identify influential healthcare providers that help treat Pulmonary Arterial Hypertension patients to shorten time until patient diagnosis by up to six months
- Developed data pipeline using over 250,000 insurance claims for future classification of health care providers using Dataiku and PySpark
- Created an interactive Tableau dashboard to easily visualize the referral network

### PERATON LABS

New York, NY

#### Data Science Intern

Jun. 2021 – Aug. 2021

- Built virtual dashboard for over 700 U.S. military bases using Plotly and Dash Python packages to visualize cybersecurity anomalies in military internet and communications
- Created developer-facing dashboard to provide real-time health metrics and performance of machine learning model's course-of-action determination
- Directly collaborated with project director and lead developer on user interface design
- Implemented Dashboards in Docker containers for use in remote machines
- Developed methodology to efficiently query more than 100,000 records of Prefect data from Elastic to use in dashboards

### DATAMINR

New York, NY

#### Research & Software Engineering Intern in AI

Jun. 2020 – Aug. 2020

- Designed approach to identify supply chain disruptions in real-time from over 5,000 daily Dataminr alerts using Looker
- Created machine learning model to predict abnormal spikes in Twitter activity following supply chain disruptions using Scikit-learn, TF-IDF and Word2Vec
- Investigated ways to detect early warning signs of future corporate action resulting from supply chain disruptions using NLP techniques
- Presented findings to six company executives to explore viability of new supply chain-related corporate risk product

**Skills:** Python, SQL, R, Excel, VBA, Tableau, Java, Looker, Elasticsearch, APIs, Git

**Interests:** Water polo, food, skiing, traveling, guitar, architecture