

# Cheryl Braus

New York, NY  
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## EXPERIENCE

### Data Visualization Freelancer

Jul 2021 – present

- Create easy-to-understand visuals programmatically based on client needs. Deliverables include static visuals, interactive visuals, and interactive online dashboards with user inputs.
- Built interactive applications with visuals for a financial advising firm to accelerate internal market research. Reduced researchers' workload by several hours per week.

### System2, Data Scientist

Jul 2020 – Jul 2021

- Built interactive streamlit applications for clients in the financial and retail industries. Applications included interactive Plotly visualizations customized to client needs.
- Led data science effort for an online jewelry retail client. Created an interactive dashboard to track internal business metrics and identify marketing opportunities by pulling data from a SQL database.
- Analyzed customer purchasing behavior by aggregating sales records from multiple data sources, including Shopify.
- Advised other data scientists when creating data visualizations for clients.

### New York Police Department, Manager - Data Analytics

Jun 2015 – Aug 2020

- Led data science operations for the Police Commissioner's Office.
- Provided analytics that helped determine NYPD policies and public statements.
- Used machine learning techniques to identify predictive factors in forecasting future violent crime.
- Determined the implications of new marijuana legislation and enforcement protocols for the Mayor's marijuana task force. Analysis enabled the NYPD to make decisions within a 30 day deadline.
- Analyzed the effects of bail reform on crime levels, and the potential relationship between bail reforms and increases in crime rates. Results used by the Police Commissioner.
- Created detailed reports of robbery and domestic violence crime patterns using geolocation, crime report, and criminal record data. Findings increased deployment and outreach efficiency.
- Identified city schools requiring more crossing guards using geolocation data, accident data, and population data in Python. Analysis used to increase student safety.
- Analyzed license plate and phone record data to assist the Detective Bureau in citywide homicide investigations. Sped up the examination of this data from months to days.
- Projects presented to NYPD executives, including the Police Commissioner, as LaTeX reports or PowerPoint presentations with data visualizations. Results often used at press conferences.

### Columbia University, MPA Program, Introductory Python Instructor

Oct 2018 - Dec 2018

- Created and led four three-hour classes for Columbia University MPA students learning python.

### 1010Data, Senior Data Analyst

Jun 2012 - Jun 2015

- Lead analyst for all gaming clients. Programmatically evaluated player data and initiated new strategies for micro-targeted marketing campaigns to increase casino revenue.
- Built a suite of queries and interactive reports for retail clients to gain business insights and monetize their proprietary data. Queries included product affinity and predicted buying behavior.
- Trained 1010data clients on the system and wrote documentation explaining system functionality.
- Created company-wide usage reports to analyze client activity on the system. Reports led to cost reduction and greater efficiency in data center operations, and an improved user experience.

### Berdon LLP, Senior Forensic Accounting Analyst

Jul 2007 - May 2012

- Conducted criminal financial investigations by analyzing documents to identify inconsistencies in bookkeeping and evidence of accounting fraud or malpractice.
- Wrote and edited expert reports in cases where Berdon LLP served as a technical expert.

## SKILLS

Python · Data Visualization (Plotly, Matplotlib, Seaborn) · SQL · PyCharm · GitHub · Streamlit · HTML · CSS · LaTeX · DbVisualizer · Domino Data Lab · Machine Learning (Scikit Learn) · Excel · Word · PowerPoint · ArcGIS · 1010Data

Data Visualization

Problem-solving and analytics

Written and presentational communication

Ability to explain complex technical concepts to non-technical professionals

Teamwork

Time management

## EDUCATION

### Cornell University

2003 - 2007  
B.A. Government

### University of St. Andrews, Online

2014 - 2015  
Certificate in Terrorism Studies

### University of Michigan, Coursera

2020  
Specialization in Applied Data Science in Python (Courses include Machine Learning, Text Mining)

### Udemy, Online

2021  
Interactive Python Dashboards with Plotly and Dash

## PERSONAL INTERESTS

Volunteer at Best Friends NY, Singer, Runner