

CHARLES J. BARRIOS

📍 **Address:** Brooklyn, NY 11208
📞 **Phone:** 347-678-4702
✉ **Email:** CBanalyst10@gmail.com
[LinkedIn.com/in/charles-barrios](https://www.linkedin.com/in/charles-barrios)
[Github.com/CBanalyst10@gmail.com](https://github.com/CBanalyst10@gmail.com)

PROGRAMMING: Python, SQL, C++, Git
LIBRARIES: NumPy, Pandas, Numpy, Scipy, Scikit-Learn, PySpark, Matplotlib, Seaborn, Plotly, TensorFlow, Keras
PROGRAMS AND TOOLS: Tableau, Git,
STATISTICS AND ANALYSIS: Hypothesis testing, A/B Testing, KNN, Regression, Neural networks, NLP, Classification, Clustering
MACHINE LEARNING: Linear and logistic regression, decision trees, random forests, multi-arm bandits, isolation forests, KNN, gradient descent, boosted trees, CNNs, NLP, naive Bayes, clustering, Recommenders
TECHNICAL SKILLS:
Python: Pandas, Numpy, SciPy Stats, Seaborn, Scikit-Learn, Keras
Big Data/Database: SQL, AWS S3, AWS EC2, Apache Spark, PostgreSQL, MongoDB
Data Science: Statistics, Machine Learning, Natural Language Processing, Topic Modeling, Data Cleaning, Feature Engineering, A/B Testing, Regression Models, decision trees, random forest
ETL Pipeline Development: OpenCV, Pillow, BeautifulSoup, Web Scraping
Workflow Environment: Docker, VSCode, Jupyter I
Data Visualization: Google Data Studio, Matplotlib, Plotly Dash
Other Skills: Agile development, Business Acumen, Analysis and Solution discovery, Predictive Modeling, Networking and Telecommunication, Exploratory Data Analysis, Data Cleaning, APIs, Web Design (Dreamweaver), Microsoft Office Suite, Photoshop, Shark, Computer Forensics, Information Security, Oracle, Business Enterprise Edition, Clarity, Remedy, Data Visualization, Networks, A+, N+ Project Management, Auditing Business Intelligence

EDUCATION

Data Science Immersive
Galvanize 2021

Bachelor of Science: (1) Chemistry, Information Technology (2) Information Technology
St. Francis College - Brooklyn, NY
GPA: 3.8/4.0, Summa Cum Laude 2010-2018

Ace Institute of Technology
A+ and N+ Networking Concepts 2019

DATA SCIENCE PROJECTS

CineScope Movie Recommender:

<https://github.com/CBanalyst10/CineScope>

An interactive movie recommender that takes in user preferences and analyzes movies and user ratings to deliver recommendations. As the user builds their profile the recommender tailors its offerings to their specific tastes, with a focus on quality movie experiences. What do users want to see?

Target Use Cases: preference discovery and catering.

Implementation: Used Requests to pull from API, Pandas and Numpy to build the data structure, Spark to predict preferences, and Flask to create an interactive dashboard for creating an account, giving initial preferences, and refining the model based on the user's selections and ratings.

Fraudulent Event Detection Case Study:

<https://github.com/jawanggit/Fraud-Detection-Project>

An investigation of FaceBook event data ending in a trained model to identify fraudulent events and the accounts which post them. Which events are scams?

Target Use Cases: Fraud discovery

Implementation: used Scikit-Learn Random Forest Classifier to build a predictive model for fraud detection. Use Microsoft Azure, PostgreSQL, and Flask to build a front-end website dashboard to pull from an API of incoming events and display occurrences of fraud.

Ride Share Customer Churning:

https://github.com/daniellkenett/churn_case_study

An analysis of an anonymous ridesharing platform's data across rides given in a 6-month period to answer the question, what determines whether or not a customer continues to use the service?

Target Use Cases: Analyzing customer platform usage and ratings to predict whether or not the customer will churn and cease to use the platform.

Implementation: Used SK-Learn to impute data and predict churn rates via Random Forest Classifier to identify what factors contribute to a customer's decision to keep using the service after initial signup or cease using the service.

WORK HISTORY

Data Analyst

NYC Department of Information Technology and Telecommunications

12/2015 to 06/2017

2 Metrotech, 4th Floor.,

Brooklyn, NY

- Performed complex in-depth calculations, used city applications, and other tools for completeness and accuracy within division's established goals. Maintained and analyzed data for regular reports; identified and interpreted trends or patterns in complex data sets. Performed duties analyzing key performance indicators for our various divisions, visualization of quantifiable data, as well as creation and maintenance of performance scorecards utilized by First Deputy Commissioner.
- Designed and developed modern data quality processes for data profiling, auditing, and monitoring. Responsible for data consolidation and creation, maintenance and usage of dynamic dashboards to facilitate robust, interactive discussions; initiated sample data.