Nick Italiano

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# **EDUCATION**

• Manhattan College

Bronx, NY

Master of Science in Applied Mathematics- Data Analytics

August 2015 - August 2019

• Manhattan College

Bronx, NY

Bachelor of Science in Mechanical Engineering

January 2011 - June 2015

#### EXPERIENCE

# • Music Hackathon/Music Community Lab

Manhattan, NY

August 2019 - Present

Freelance Data Engineer

- MooTweet-Brand Sentiment and Topic Tracking: Developed Real-time Twitter Sentiment Analysis Web
  Application for the Music Hackathon/Music Community Lab organization to rebrand under one Twitter account.
  Python, Heroku, and Flask were integrated with NLP(Natural Language Processing) methods. Automated data
  backups are processed daily into AWS(Amazon Web Services) for storage and analytics.
- **ZooTweet Brand Improvement and Topic Tracking**: Cloud version that leverages Apache Kafka's storage scalability, which is already used in real-time Twitter data streaming apps.
- Arctic Code Vault Contributor: Contributed mcl-mh-brand-sentiment-analysis-app repository to the 2020 GitHub Archive Program, storing the code within arctic permafrost in Svalbard, Norway for the next 1000 years.

Self-employed

Staten Island, NY

March 2017 - July 2019

 $Data\ Scientist \mid Data\ Engineer$ 

- Data Consumption: 3+ years of cloud architecture experience—focusing on MIR(Music Information Retrieval) applications—that support APIs, Predictive Analytics, and Data Lakes. Agile(Scrumban), CD/CI(continuous development/integration), and automated testing methods were implemented.
- Data Storage: Administered the design, security, and management of AWS S3, EC2, Athena, EMR, and Redshift instances. Airflow enabled daily consumption via data pipelines, ETL metadata injections, and Redshift queries.
- Predictive Analytics & Machine Learning: Created *POC(Proof of Concept)* recommendation apps to enhance the musical content discovery process. The R-Shiny apps used collaborative filtering with Spotify's streaming APIs.

### Manhattan College

Bronx, NY

Graduate Research Consultant

October 2015 - July 2016

- Big Sagebrush Data Visualization: Developed data visualization for researchers at Manhattan College. Prior attempts to illustrate the unique growth of *Artemisia tridentata*(Big Sagebrush) proved unsuccessful.
- SIAM Annual 2016 3D Digital Presentation: Presented Computation for Imaging in Biology research and an interactive visualization demo– a conference first– at the SIAM(Society of Industrial and Applied Mathematics) Annual 2016 National Mathematics Conference.

### • Con Edison of New York

Queens, NY

Graduate Engineer/Analyst Aide

March 2013 - May 2016

- **High Bay LED Retrofitting Project**: Managed Astoria Transformer Shop's LED retrofitting project that saved approximately \$12,400 per year.
- Underground Transformer Unit Key Performance Indicators: Created new, cost-saving KPIs(key performance indicators) for underground transformer(UGT) units that prompted the decommissioning of 3 critical UGT processes after the Q3 meeting with the VP of Electric Services.

# PROJECTS

- Cryptocurrency Dashboard: POC, multi-page data product—that analyzes live cryptocurrency services for pricing insights—using Dash frameworks, HTTPS login protocols, and real-time data streaming.
- **GO.io**: Developed a portfolio site for NYU law student who wanted to increase her personal brand. Client requested a similar design to nickitaliano.io.; however, one that showcases her extensive entrepreneurial and legal expertise.
- Discover Weekly Email Alert: Built Spotify Weekly Discovery Pipeline using Gmail, AWS and Luigi. Expanded from author to forward a users Discover Weekly Playlist history via Chron.