87 Wiman Avenue Staten Island NY 10308

Nicholas M. Italiano

(646) 671-2297 italianonick@gmail.com

Employment

Data Scientist & Data Engineer Data Engineer | DJ/Producer

Freelancer

March 2016 – Present July 2019 – Present

- Performed a Real-time Twitter Sentiment Analysis, for the Music Community Lab (MCL) and Music Hackathon (MH) organizations, to measure sentiment and identify client's most impactful Twitter account
- Streamed and collected Twitter Data with Tweepy, MySQL and Python. Deployed a Real-time Twitter Analytical Web Application on Heroku using Dash and Plotly in Python

Data Engineer Self-employed Febuary 2019 – Present

- Built a data warehouse storing 99% of the Million Song Dataset (296G). Integrated AWS services
- Embed Shiny mobile app to an AWS EC2 instance, optimizing persistent storage (CRUD) performance using MySQL and R

- Created Genrefy, a web-based music application, for the Spotify^R developer showcase
- Increased 2017 profits by 33% as an open format disc jockey by using the app for business goals

FC Associate I Amazon.com October 2018 – March 2019

- Utilized *Takt time* and Kiva mobile robots (AI-integrated systems) to hit our teams' unit processing goals
- Specially trained to use powered industrial equipment and troubleshoot workstations (pickers, conveyors, etc.)

Graduate Engineer/Analyst Aide Con Edison of New York May 2015 – March 2016

- Managed Astoria Transformer Shop's LED retrofitting project that saved approximately \$12,400 per year
- Created a new *KPI (key performance indicator)* that prompted 3 unit classes (approximately 30 units per annual) to be decommissioned after Q3 meeting with the VP of Electric Services

Graduate Research Consulant Manhattan College October 2015 – July 2016

- Developed *data visualization* for biological researchers at Manhattan College. Prior attempts to create an illustration depicting the unique growth of *Artemisia tridentata* (Big Sagebrush) were unsuccessful
- Presented the research and demo in digital format at the SIAM Annual 2016 National Mathematics Conference

Education

Riverdale, NY Manhattan College January 2011 – May 2020

- M.S. in Applied Mathematics- Data Analytics, May 2020 (Expected)
- B.S. in Mechanical Engineering, May 2015
- Graduate Coursework: Advanced Linear Algebra with Applications; Advanced Statistical Inference; Probabilistic Methods; Database Methods for Analytics; Data Mining; Machine Learning
- Undergraduate Coursework: Legal Aspects of Engineering; Probability and Statistics for Analytics; Advanced Business Statistics
- Independent: CS109: Introduction to Data Science (Harvard SEAS)

Technical Experience

Projects

- Twitter Brand Sentiment Analysis (2019). Identified brand sentiment patterns for MCL/MH clients by providing music entertainment domain knowledge, and both engineering and analytics services
- 2016 Presidential Election Simulator (2016). Simulated the 2016 Presidential Election using Monte Carlo and Parallel Computing methods with R and AWS (EC2 performance boost)

Additional Experience and Awards

- Data Engineer | DJ/Music Producer (2019): Attended August 2019 Music Community Lab "Music Hacking & Accessibility" event at Spotify^R headquarters NYC
- Masters Student (2016): Attended invite-only 2016 Google Math Summit NYC
- Graduate Research Consultant (2016): Inducted into Sigma Xi: The Scientific Research Society for presenting our collaborations' research and data visualization demo at 2016 conferences
- Masters Student (2015): Audited Harvard CS109: Data Science; an online course covering topics from data collection and analysis, to data streaming and batch processing using industry standard *data science tools* and *methodologies*

Skills and Interests

- Languages/technologies; Proficient in R, Python, SQL; familiar with Java, Hadoop, Spark, Hive; Previously used MATLAB, C++, Javascript, HTML/CSS. Experienced with Git, Amazon Web Services, REST Web Services, iPhone/Android, Unix/Linux/Ubuntu, Heroku/Netlify, MAMP/LAMP stacks
- Organizations: SIAM (Society for Industrial and Applied Mathematics Conference Membership); Sigma Xi (Scientific Research Society Associate Member); MADD (Mothers Against Drunk Driving Volunteer Vendor)