# BLAKE SPENCER

DATA SCIENTIST

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## **SKILLS**

**LANGUAGES & LIBRARIES:** Python, SQL, Javascript, HTML5, CSS, Pandas, Scikit-learn, Numpy, React, Redux, Express, Sequelize, Node, Keras, Beautifulsoup, Selenium, Flask, D3

MACHINE LEARNING: Classification, NLTK, Linear/Logistic Regression, Clustering, Neural Networks

## **EXPERIENCE**

#### Metis, Data Scientist, New York, NY

Jan. 2019 - Mar. 2019

- Completed a 12-week full-time intensive bootcamp
- Designed 5 end-to-end projects using python, machine learning, statistics, and data visualizations. Please see project section

#### Fullstack Academy of Code, Software Engineer, Teaching Fellow, New York, NY

July 2018 - Nov. 2018

- Mentored and taught computer science fundamentals, programming concepts, debugging techniques, and various libraries to 30+ students
- Developed an educational web app Global State of Cyber for the preliminary course for a cyber security bootcamp View Project
- Created UX interface composed of an interactive map with embedded video playlist and animations creating a cyber security-themed course
- Protected API routes with admin capability for adding locations with a click on a map

### Digital Genius, Data Analyst - Customer Success Team, London

Sept. 2017 - Jan. 2018

- Query client contact center database using MAQL to observe added value of using Digital Genius A.I. technology
- · Created metrics, reports and dashboards using Excel and Salesforce for clients to understand usage of the technology

#### YOPA, Data Analyst - Operations, London

June 2017 - Sept. 2017

- Analyzed contact center data creating capacity plans, dashboards and reports to optimize the sales team monitoring call volume and agent progress using Excel and SQL
- Constructed and implementing cost saving plans for 'Sale Board' stocking and distribution around the UK saving \$3500 a month

## **PROJECTS**

#### Music Recommender

Analyzing MP3's to associate similar songs based on percussion and harmonics

- Using 700 MP3 files, created Spectrograms breaking down each song's harmonics and percussion patterns
- Fed the spectrograms into an AutoEncoder Neural Net to filter out noise and reduce dimensionality
- Used the middle layer of the Neural Net to extract features and then used Cosine Similarity to recommend songs

#### **Deepdive into PitchFork Music Reviews**

Natural Language Processing album reviews

- Scraped text from 40,000 music reviews from Pitchfork.com with BeautifulSoup and Selenium
- Preformed topic modeling using NMF on reviews to extract high level content (Artist, Culture, Sound, Interpretation) to look at variations in reviews
- D3 to visualize and explore differences in reviews broken down into score and genre

#### CityChow

Website for browsing nearby restaurants filtered by category with a tinder theme | View Project

- Web app to filter restaurants by radius, category, price and 'open now' using Yelp API
- Technologies used: React-Redux, Sequelize, Express.JS, PostgreSQL, Material UI, Facebook OAuth

## **EDUCATION**