Alexander Fioto

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Github
Portfolio

DATA SCIENTIST

Data scientist with 8+ years of entrepreneurial experience who excels at machine learning, data storytelling, natural language processing, and deep learning techniques. I enjoy the crossovers of data and music and see data as a tool for effective strategizing and problem-solving. Seeking to leverage my small business and music industry expertise in diverse applications of data science.

TECHNICAL SKILLS

- **Code:** Python, SQL, HTML. Knowledgable in R and Scala
- **ML / Deep Learning:** Scikit-Learn, SpaCy, NLTK, Gensim, Tensorflow, Keras
- **Visualization / Statistics:** Pandas, NumPy, SciPy, StatsModels, Matplotlib, Plotly, Seaborn, Tableau
- **Stats Techniques:** A/B Testing, Feature Engineering, Sampling, Inferential Stats, Hypothesis Testing
- **ML Techniques:** Regression, Classification, Predictive Modeling, Forecasting, Clustering
- **Data Management:** Relational Databases, Web Scraping, Data Mining
- **General Tools:** GitHub, Flask. Knowledgable in AWS
- **Certifications:** TensorFlow Developer Specialization, Tensorflow Natural Language Processing, General Assembly

PROJECTS

Generative Chatbot
Github Repo
Demo

- Developed a generative chatbot trained on television script dialogue
- Employed transfer learning from Open AI's open-source GPT2 natural language model
- Designed custom python class to handle control flow during user interaction
- Trained and incorporated random forest classifier model for character prediction of user input
- Embedded episode recommender using NLP text summarized word vectors and user input
- Merged with IMDB's API to display plot summaries as well as a direct link for viewing

Decoding COVID
Github Repo
Markov Model App
Visualization by State

- Analyzed mask usage and sentiment correlation to COVID cases and political party affiliation
- Deployed via Heroku, my team created a suite of applications for tracking US COVID rates
- Applied Hidden Markov Model to identify regime changes in daily case rates
- Created an interactive data visualization tool to compare infection rate between US states

Reddit Classification
Github Repo

- Scraped 30K posts from the "Machine Learning" and "Artificial Intelligence" sub-Reddits
- Tuned Naive-Bayes classifier to predict with 85% accuracy respective sub-Reddit
- Updated with Tensorflow's current NLP classification framework for optimized performance

EXPERIENCE

General Assembly
Aug-Nov 2020

Data Science Fellow
- Obtained certification from 500+ hour immersive fellowship in Machine and Deep Learning
- 2nd place in cohort Kaggle Competition predicting housing prices using sci-kit learn pipelines

Performance Contractor
2016-Present

Business Owner
- Create and execute contracts for local and national performing arts organizations
- Assess and advise budgets, pay scale, and working conditions. Consult for hiring managers

NC Symphony
2012-2020

Associate Principal Trumpet (2020)
4th / Utility Trumpet (2012-2019)
- Led the North Carolina Symphony Brass in performances, recordings, and broadcasts
- Collaborated with top industry professionals and Grammy-winning artists

EDUCATION

Rice University | Houston, TX
- Master's Degree, Performance and Literature, 2011

The University of Michigan | Ann Arbor, MI
- Bachelor's Degree, Performance, 2009