

# Jack Rayner

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## EDUCATION

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### General Assembly

*Data Science Immersive Bootcamp (Full Time)*

Denver, CO

Jan. 2022 - Apr. 2022

**Relevant Topics:** Python3, Data Engineering, Classification Models, Natural Language Processing, Deep Neural Networks

### Coursera

*University Courses (Online)*

Denver, CO

Dec. 2021

**Relevant Certifications:** IBM Data Analysis With Python, Data Storytelling (University of California, Irvine)

## EXPERIENCE

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### General Assembly

*Data Science Immersive Bootcamp (Full Time)*

Denver, CO

Jan. 2022 - Present.

#### **Project 1 - State performance in Higher Education**

- Used (Simple and Multi) Linear Regression modeling to make accurate predictions on the admissions of universities
- Applied PEP8 code styling and annotation to Python3 in addition to other best practices to ensure human readability
- Cleaned dataset and performed Exploratory Data Analysis to gain insights in the data, and to evaluate key features

#### **Project 2 - Real Estate Market Analysis**

- Made predictions using advanced Regression techniques such as Ridge and Lasso for modeling and selecting features
- Gained industry knowledge of the real estate market and determined housing features most correlated to sale price
- Used Seaborn and Matplotlib to create elegant data visualizations and make insights and conclusions easily readable

#### **Project 3 - Natural Language Processing for Classifying Reddit Posts**

- Performed Sentiment Analysis, stemming and lemmatization and used them as features for classification modeling
- Classified large amounts of data using a variety of models including Random Forest, Logistic Regression, and KNN
- Optimized code performance by analyzing Big O Notation and its relationship to time and memory efficient modeling
- Gain experience with APIs and web scraping using python's requests library, and beautiful soup for parsing HTML

#### **Project 4 - California Wine Production**

- Utilized GIT/hub with Jupyter Labs in a team environment for project management, collaboration, and organization
- Studied the effect of climate change on the California wine market to forecast production & inform business analytics
- Collaborated with other data science immersive students to create time series models of CA wine grape production

#### **Capstone - Clustering Opinions on the War in Afghanistan**

- Utilized PyTorch and Tensor flow to build Deep Reinforcement Learning models and Deep Artificial Neural Networks
- Used the New York Times API to obtain tens of thousands of headlines and articles about history and current events
- Performed Tokenization, Stemming, TFIDF Vectorization and Latent Dirichlet Allocation to extract themes from data
- Used unsupervised learning models (K Means, DB Scan, and others) to cluster the headlines into divergent opinions
- Created interactive Tableau visualization of the clusters, allowing them to be understood by a non-technical audience

### Municipal Emergency Services

*Warehouse Specialist*

Denver, CO

Aug. 2020 – Dec. 2021

- Coordinated shipping of technology, medical supplies, & high value items (\$100,000+) domestically & internationally
- Directed warehouse inventory organization by documenting and tracking regular incoming and outgoing shipments
- Trained five new employees on warehouse responsibilities to enable Denver location to double in size over 3 months

### Freelance Music Production

*Music Producer, Mixing and Mastering Engineer*

Denver, CO

Sep. 2016 – Present

- Collaborated with fellow Denver producers, vocalists, and performers in recording, mixing, and mastering albums
- Designed digital graphics for digital marketing campaigns and ran them in order to build interest in upcoming music
- Learned industry standard software tools, and created large preset libraries able to be accessed by other producers

## ADDITIONAL INFORMATION

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**Skills:** Python3, Pandas, Scikit learn, Numpy, Seaborn, Matplotlib, Jupyter Labs & Notebook, Text Editors (Atom, Visual Studio Code), SQL, Lisp, Video Editing (Final Cut Pro), MS Office (Word, Excel, PowerPoint), Git, GitHub, Project Management (Miro), Slack, Technical Writing, Academic Writing, German (Intermediate), Music Production (Ableton 11)

**Interests:** History (American/European), Western Philosophy, Music Production, Rock Climbing, Luxury Watch Markets