# **Anterra Kennedy**

anterrakennedy.com anterrakennedy@gmail.com DATA SCIENTIST

LINKEDIN: <u>anterrakennedy</u>

GITHUB: <u>anterra</u> 720.556.6098

TUNE - SEPT 2020

# Education

#### **BS Physics**

University of Denver, 2017 Minors: Astrophysics, Math, French President: Society of Physics Students

### **Skills**

#### Languages

Python

SQL

Git

HTML/CSS

#### Libraries

Pandas

NumPy

Scikit-Learn

 $\mathsf{NLTK}$ 

Beautiful Soup

Selenium

Flask

Tensorflow

Keras

# Machine Learning Algorithms

Regression

Classification

Clustering

**Dimensionality Reduction** 

Natural Language Processing

Unsupervised Learning

Bi-Directional LSTM

Neural Networks

#### Visualizations

Matplotlib

Seaborn

Tableau

Unity

#### Other

Communication

Initiative

Collaboration

Web Scraping

# **Experience**

#### **Data Scientist**

Metis

Designed and executed five end-to-end machine learning projects during 12 weeks of immersive training in data mining, analysis, and machine learning, and was selected as TA for the following cohort.

#### **PROJECTS:**

#### • Vinyasa Krama: Al-Generated Yoga Classes

- Created an app which generates complete, well-structured and unique yoga classes, custom to a user's desired 'peak' pose, at the click of a button.
- . Utilized the Unity game engine to build a 3D interface of a yoga teacher who demonstrates the class for the user to follow along with.
- · Leveraged deep learning and trained a bi-directional LSTM for sequence prediction.
- . Tools: LSTM BRNNs, Tensorflow, Keras, Word2Vec, Transfer Learning, Flask, Unity

#### • The Unsupervised Self

- . Discovered similarity between descriptions of consciousness in quantum mechanics & eastern philosophy as an approach to the mind-body problem, with NLP & unsupervised learning.
- . **Tools**: topic modeling with LDA, LSA, NMF, CorEx; visualization of topic similarity with pyLDAvis, document type similarity with PCA and t-SNE; NLP pre-processing including CountVectorizer & SpaCy for lemmatization

#### · Yoga Class-ification

- . Classified yoga sequences into 8 different genres, based only on the poses practiced.
- . Built a flask app where yoga teachers can create classes, and have them classified.
- · Handled multi-class classification problem and class imbalance.
- . Tools: Classification algorithms (Logistic Regression, KNN, Decision Tree, Random Forest, Naive Bayes, XGBoost), ML Pipeline, ROC-AUC Curves, Sci-kit Learn, Flask, HTML/CSS

#### • Hidden Gems: Finding the Best Secret Trails in America

- · Applied a linear regression model to 40,000 hiking trails to find the best undiscovered ones.
- . **Tools**: Linear Regression, VADER Sentiment Analysis NLP, web scraping with Selenium & Beautiful Soup, Pandas, StatsmodelsOLS, Feature Engineering and LassoCV

#### **Optician**

JUNE 2018 - APR 2020

Alberta Eye Care

Leveraged a thorough understanding of optics as applied to the optometric field, to offer patients unparalleled sight.

#### **Aerospace Engineer**

JUNE 2017 - JUNE 2018

Pioneer Astronautics

Designed and developed novel in-situ resource utilization technologies for NASA, innovated to aid in the exploration of Mars.

#### PROJECTS:

- . Advanced Mars Water Acquisition System (NASA SBIR Phase 1)
- . Extraterrestrial Metals Processing System (NASA SBIR Phase 2)
- · Optimization of Spirulina Production for Spaceflight (TRISH Proposal)