# Brian VandenAkker

# **Projects**

### **COVID-19 Open Research Dataset Search Engine**

The search engine utilizes latent Dirichlet allocation to generate a probability distribution of topics from the corpus for each abstract in the CORD-19 Dataset. The probability distributions are used to find other similar documents which are generated on a <u>user interface</u> using Plotly, Dash, and Flask.

### Early Stage Effects of State Action on COVID-19

This project attempts to answer which COVID-19 mitigation measures (ex. School Closings or Contact Tracing) where most effective by applying Random and Fixed Effects models on Oxford's Government Response Tracker. Additionally, a <u>Dashboard</u> is created to visualize response changes.

### Federal Reserve Beige Book Classifier

The Beige Book is a qualitative report published eight times a year by the U.S. Federal Reserve. The report is published two weeks before each FOMC meeting at which an announcement about near-term monetary policy action is made. This project attempts to find any clues about the FOMC decision by using NLP and classification techniques on the Beige Book.

# **Employment History**

### Intelligence Chief & Platoon Sergeant, United States Marine Corps

MAY 2013 - JUNE 2020

- Responsibilities included the daily management and guidance of 10 Intelligence
  Specialists in support of the Battalions intelligence requirements, maintaining
  expert situational awareness of our areas of operation and accounting for over
  \$2.4 million worth of equipment.
- Notified and advised the commanding officer and battalion staff on operationally critical events which occurred in and around the INDOPACOM region during the first half of fiscal year 2020.

Honors & Awards: Navy and Marine Corps Achievement Medal

# **Education**

#### Master of Science in Economics, Boston College

SEPTEMBER 2018 - MAY 2019

GPA: 4.0

#### Bachelor of Arts in Economics, Minor in Mathematics, Merrimack College

SEPTEMBER 2014 - MAY 2017

GPA: 3.96

# References

Dr. Razvan Veliche, Data Scientist

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### **Details**

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#### Links

Website

<u>Github</u>

## Skills

Python

R

SQL

Scala

Apache Spark

Scikit-Learn

TensorFlow

Keras

Flask Django

Plotly/Dash

Unsupervised Learning

Supervised Learning

SpaCy

HTML/CSS

Bash

Web Scraping

Probability/Statistics

Git & Version Control