

Summary

Resourceful individual possessing expertise in statistical model development and scalable data storage. Specifically, skilled in scrutinizing large data sets through a combination of architecture and machine learning to yield signal within the noise.

Education

Boise State University – Boise, ID

- Bachelor's in Business & Economic Analytics

Experience

Languages

- Python
 - NumPy
 - Tensorflow
 - Scikit-learn
 - Pandas
 - Matplotlib
 - Paramiko
- Java
- C

Algorithms

- Ordinary Least Squares
- Logistic Regression
- [Decision Tree](#)
- Graph & [Tree Searches](#)
- Sorting
- Greedy
- Dynamic Programming

Data Visualization

- PowerBi
- Matplotlib
- [Choropleth](#)

Databases

- SQL, mySQL
- MongoDB
- Redis

Statistical Tools

- Stata
- Mast-ML
- Citrination

Course Work

- Econometrics
- Probability
- Data Science

[Financial Spending Model](#) – Idaho Policy Institute (IPI)

- Utilize IPI's data describing government finances & city crime rates for 200+ cities spanning a 20-year period
- Augment their dataset by importing relevant statistics from Bureau of Labor Statistics, Census Bureau, etc.
- Plotted various visualizations such as distributions & heatmaps describing the dataset
- Performed a chi squared test to identify independent features
- Removed multicollinearity among independents
- Development of a Time Fixed Effects, Bayesian Ridge & Random Forest regression models
- Optimized various hyperparameters
- Successfully identified relationships between government spending and crime rates among cities in Idaho allowing government officials to make more informed decisions.

Machine Learning Researcher - Informatics Skunkworks

- Collaborate with PhD students to accelerate research towards the mass production of bulk metallic glasses.
- Bolster workflow through data preprocessing and visualization
- Train models to identify alloys with high glass forming abilities
- Create Machine Learning models utilizing config files for Mast-ML

Music Classifier – An Independent Venture

- A tool allowing music professionals to better understand & interact with large music collections
- Utilize NLP & DSP to create an ensemble of unsupervised learning models to cluster songs into collection unique genres
- Improve preexisting song recommendation systems by removing noise from the input data, resulting in a less biased system