

Education

BS: Data Science, Expected December 2020

Brigham Young University – Idaho

- GPA 3.98
- Data Science Society Project Manager (2 years)
- Helped design CSE250 & CSE451 courses (Data Science Programming in Python, Big Data Programming)

Experience

Data Science Intern

June 2020 – Current

Intermountain Healthcare

- Built a productionized predictive risk model using LightGBM in python that assigns a risk score of being hospitalized for each positive testing covid19 patient
- Optimized risk model to mitigate high class imbalance and allow care givers to reach out to at risk covid19 patients with high precision
- Building an unsupervised anomaly detection model leveraging K-Means and Isolation Forest to identify ED patient encounters with incorrectly assigned CPT codes
- Optimized sql queries to gather feature data from various tables that decreased the amount of data loss

Data Science Consultant

January 2019 – August 2020

Nevada Gold Mines/Barrick Gold Corp. (Manpower Group)

- Wrangled complex datasets leveraging the tidyverse suite, from several sources, to streamline analysis
- Identified violation trends that amass to millions in losses by building program in python to automate the pulling and cleaning of government MSHA data
- Developed Power Bi reports to improve mining safety and accident prevention

Data Analyst

April 2019 – May 2020

Brigham Young University - Idaho, *Career & Academic Advising*

- Built a logistic regression model using sklearn framework in python that predicts graduation rate with 70% accuracy – leveraging features available by the end of the student’s first semester
- Performed ad hoc analysis on at risk students using pandas, numpy, and matplotlib libraries
- Built and maintained Power Bi reports describing KPI’s and appointment availabilities that increased data usage and data driven decisions in the department

Projects

- Built a convolutional neural net, using Keras library, leveraging transfer learning, regularization, and data augmentation techniques to predict Melanoma on a patient with 98% accuracy and AUC score of .90
- Built random forest model using sklearn that predicts heart disease with 83% accuracy

Skills

Python	R	SQL	Keras
Machine Learning	Scikit-learn	Spark	Docker