

Objective

I am a recently graduated physics graduate student looking to make the exciting leap into analytics/data science.

Education

Central Connecticut State University, New Britain, CT 06053

- Graduated winter 2019
- Bachelor of Science in Physics, Bachelor of Arts in Mathematics, Numerous Mechanical Engineering Credits.
- 3.69 GPA/4.0 Scale

University of California Santa Cruz, 1156 High St, Santa Cruz, CA 95064

- Graduated with Masters from physics PhD program.
- Graduated Spring 2021

Skills

- Python, NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, mlxtend, exploratory analysis, Classification, regression, clustering, knn, Neural networks, Pytorch, NLP.
- Proficiency in all Microsoft Office applications, Matlab, Minitab.
- Technical writing for scientific publications, oral presentations of research as poster or PowerPoint, team-oriented research, former physics lab instructor.

Experience

Exploratory Data Analysis of Professional (CS:GO) Gamer's Gear and Settings, and Modeling Player Accuracy Performance

- Exploratory data analysis to describe trends in what gear/settings pro players prefer, and modeling whether a player has above average aim based only on their gear/settings.
 - Managed an increase in model performance of 17% (to 67%) over original data through feature creation (binning, frequent patterns, clustering, separation by player role), filter methods (chi2 tests with class target), and wrapper methods (sequential feature selection).
(*Python, NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, mlxtend, exploratory analysis, Classification, regression, clustering, knn*).

Relevant Coursework

- CSE 242: Data Mining – Completed various assignments involving classification and unsupervised learning.
- CSE 243: Machine Learning – Completed various assignments involving clustering, classification, and deep learning.
- Engineering Statistical Analysis of Operations (Multiple regression, ANOVA, statistical models. Evaluated on both mathematics and ability to draw conclusions from analysis on example data using Minitab).
- Computational Methods for Engineers (Matlab and advanced functions of Excel).
- Modeling of Dynamic Systems (Matlab used to model and solve mechanics problems).