

## **Abstract: Machine Learning with Naive Bayes, KNN and Multiple Linear Regression**

Understanding the correlation and relationship between a person's personality and drug consumption habits can be of great use in the helping of those who might need it. This research was done in an attempt to explore that relationship with the hopes that the results would be fruitful enough that they could potential help others understand themselves in this area of their lives. This paper explores a dataset which contains information concerning respondents' general attributes, personality scores, and drug consumption. Our methods for doing this include k-nearest neighbors (KNN), regression analysis, and naive Bayes classifiers. Our results are as follows: 59 percent accuracy in predicting sensation seeking given all else, 61 percent accuracy in predicting country of residence given all else, among other results detailed later in the paper.