

Visualizing Graduate Admissions Data

CMPS 161: Final Project

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March 20, 2017

Abstract

Abstract goes here!

1 Introduction

In 2017, there were nearly 1100 applicants to the UC Santa Cruz graduate admissions program. Given the unusually large size of this applicant pool, making sense of any large-scale trends simply by looking at their records becomes an intractable problem. In addition to the high volume of applicants, the students' records contain a number of potentially interesting variables to be analyzed: quantitative data, including test scores and GPA, and qualitative data, such as the applicants' research interests, countries of origin, and other filters. In this paper, I attempt to develop visualizations to identify correlations in this data that could be relevant to the selection process. I have attempted to make this paper accessible to a reader with no background in visualization by providing both high-level alongside technical descriptions of the problem and my approach.

2 Approach

The large number of variables and the high volume of records to be analyzed makes this a classic multivariate visualization problem, and so I take a relatively standard approach: the parallel coordinate plot. In a typical graph, the number of variables available to be displayed is limited to 2 or 3, the number of spatial dimensions, so only correlations between 2 or 3 variables may be analyzed at a time (for example, in a scatter plot). The parallel coordinate plot generalizes this graphical approach

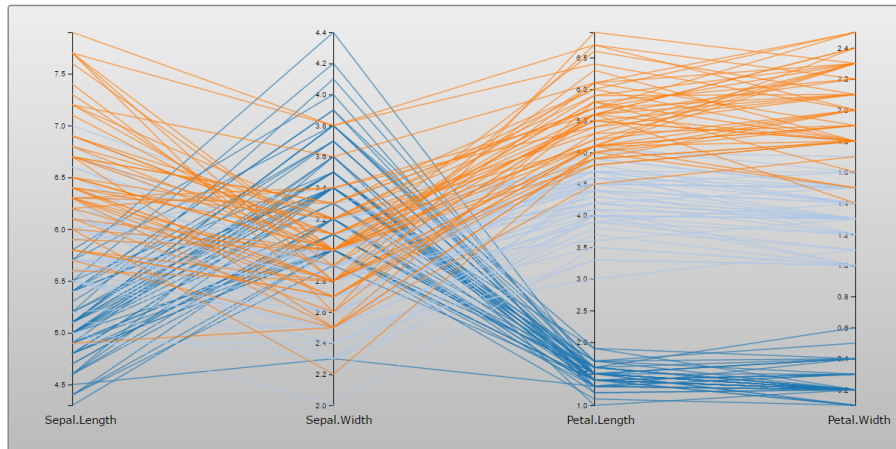


Figure 1: Visualizing Edgar Anderson's Iris dataset. In this example, color is mapped to species of iris.

3 Implementation

3.1 Processing Dataset

4 Results

5 Conclusion

References

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