#### **Academic Journals**

#### Introduction

Going through that data exploration exercise really changed how I see information. It wasn't just about running code; instead, it showed me what digging into datasets actually means, which was a real shift in understanding.

# **Description of Experience or Topic**

The notebook detailed Exploratory Data Analysis - a crucial preliminary stage preceding machine learning model construction. I grasped setting up the workspace via library imports; namely pandas, NumPy, matplotlib, moreover seaborn. We employed a fabricated customer dataset, giving me hands-on experience mirroring practical data investigation. To get a feel for the information, I checked out its basic layout - what was there, what wasn't, and what kind of data it held - with tools that showed me quick previews alongside detailed summaries.

#### **Personal Reflection**

Initially, exploratory data analysis seemed like simply making graphs. However, it quickly became clear that grasping the narrative within the data was key. As my ability to decipher visualizations grew, so did my assurance. Furthermore, I began to see how minute aspects - like variable formats or unusual values - influenced reliable insights. Before this, I'd studied stats - distributions, how things relate - so it felt familiar. However, it also pushed me to truly examine the numbers, to wonder what stories they concealed instead of just accepting them.

## Discussion of Improvements and Learning

I learned a lot during this – not just about the technical stuff, but how to think things through. Specifically, I picked up Python, figured out ways to show data clearly, and likewise honed my problem-solving abilities. Digging into things properly means being nosy, staying calm, noticing small stuff. Consequently, those abilities should help with school assignments - even jobs where deciphering information matters alongside making choices.

### Conclusion

Digging into this project really showed me ways to make sense of information. I now have a feel for scrubbing data, spotting trends, then displaying what I found.