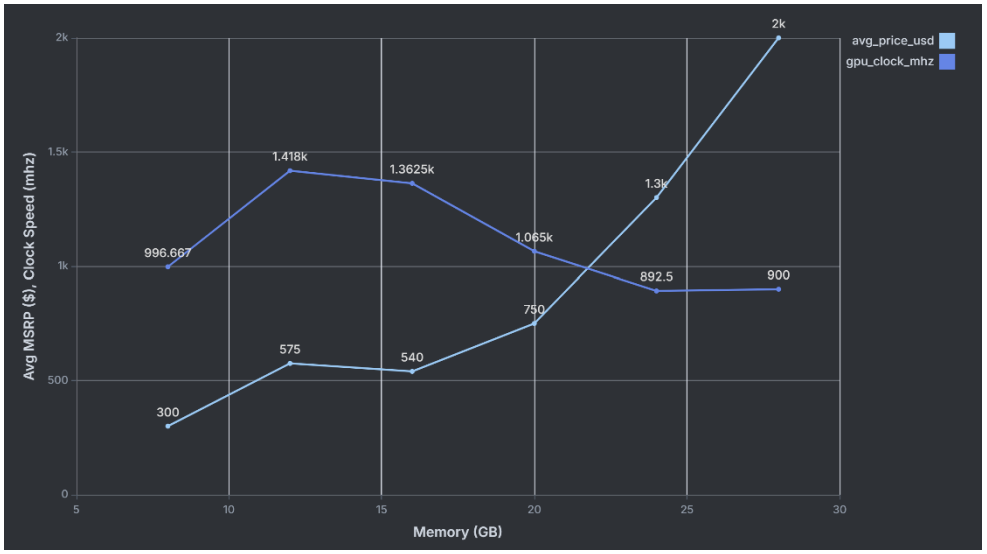
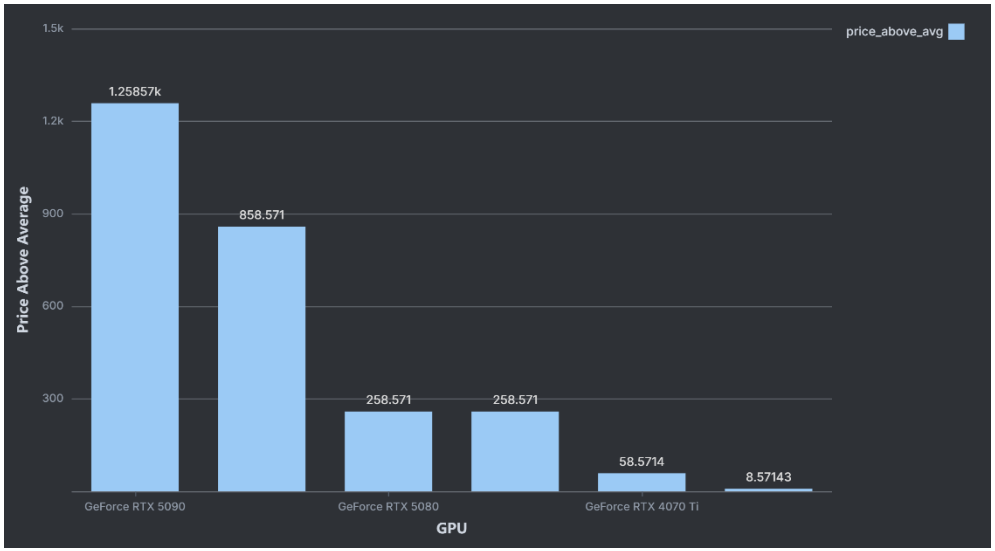
Descriptive Analysis: Memory and Clock as a predictor for Price

- Memory increases with price; clock speed does not



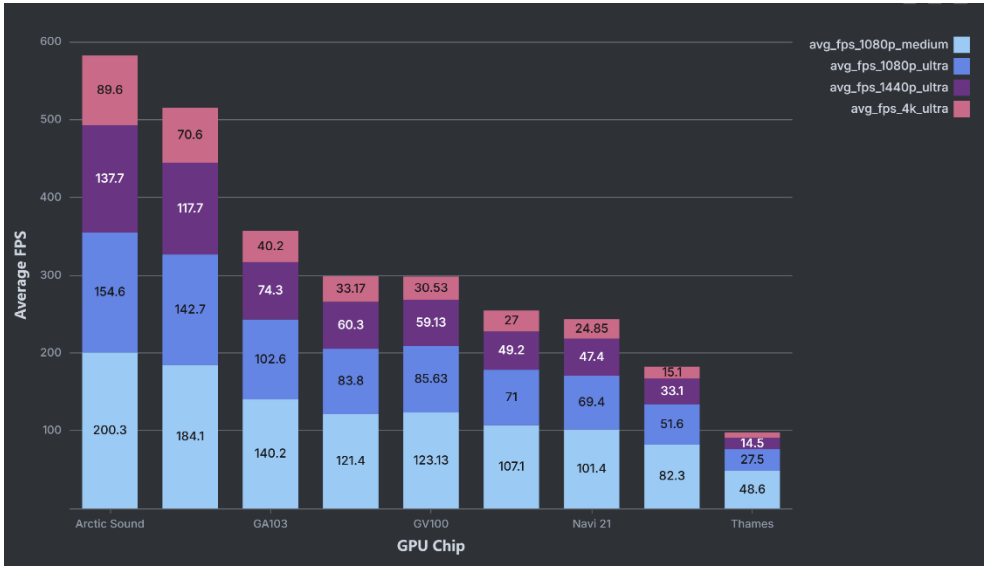
Diagnostic Analytics: GPU Price rankings based on quality specs

- NVIDIA all top 3 and are 4 / 6 in the top 6



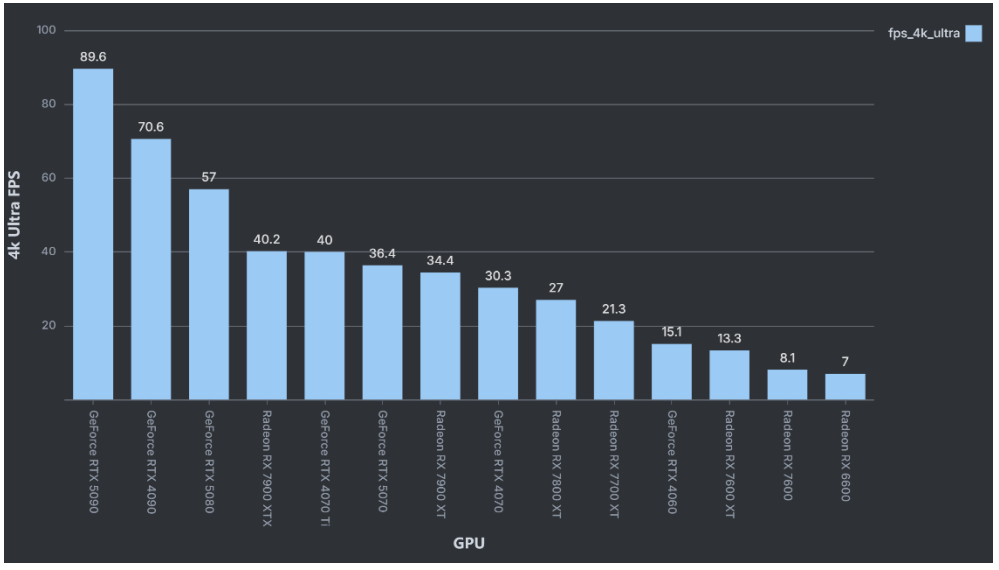
Descriptive Analysis: GPU chip average FPS

- Arctic Sound best, Thames Worst



Diagnostic Analytics: GPU rankings based on FPS performance

- NVIDIA all top 3 while AMD all bottom 3



To create the visualizations, I initially attempted to use Looker, but I encountered an issue where FPS performance values were stored as text (e.g., "100% (144.0)"). This prevented aggregation on these metrics making this unusable for the data I had selected. As an alternative, I went to PopSQL, which allowed me to execute SQL queries directly on my PostgreSQL database, therefore I was able to transform the FPS performance into numbers using CASE and REGEXP_MATCHES commands in SQL. This format allowed for the transformation of the FPS data into numbers which made It possible to perform aggregations on the data for proper visualization. Each chart was created directly in PopSQL by running the queries developed during Milestone 3 and formulating charts that best showcased the data in the "Chart" tab. I prioritized using bar charts for the rankings to show the benefits NVIDIA GPUs had over AMD, and other chart forms such as line charts and stacked bar charts for the descriptive analytics. Once all the charts were created, I went into the appearance section to rename all the axis titles, rename the legends, and fi up other formatting options such as coloring and number labels to create the cleanest looking visualization. PopSQL, however, does not currently support dashboard creation for all users, so to work around this, I exported each individual chart and compiled them manually into this PDF. This workaround enabled a clear visual presentation of both descriptive and diagnostic insights for each data source.