

# Ordered Sets In Data Analysis

Big Home Work: Lazy Learning

#### Frank Acquaye

fakvey@edu.hse.ru
http://acquayefrank.github.io/

National Research University Higher School of Economics (Moscow)

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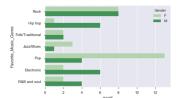
#### Choice of Data



Can we tell peoples gender based on their preferences. Since gender is determined by society this might be difficult. e.g Among my circles in Ghana pina colada may be considered feminine where as Hennessey is considered musculine.

### Some Graphs





I did a bit of data exploration so I would have a better sense of how to implement my aggregation function. But it wasn't that helpful since most of the attributes differed by one or two line items. But after finishing I believe this particular graph was more informative than I thought.

## Scaling



Nothing to see here.It's all categorical data

## **Aggregation Function**



$$|\frac{\mathit{Supp}_{\mathit{F}}(\mathit{P})}{|\mathit{F}|} - \frac{\mathit{Supp}_{\mathit{M}}(\mathit{P})}{|\mathit{M}|}| \geq 0.2$$

#### Conclusion



- Predicts 8/12 correctly for a single attribute
- Generalized it for multiple attributes but still Pop stood out
- Yet to add F1 Score, Precision and Recall and perhaps Cross Validation
- Possible tests with other data sources