Notes

* Introduce yourself
* Patent filing volumes -> both initial filings of patents and renewing an existing patent
* Patent filing revenue is a large component of the USPTO budget, and thus creating a model that can accurately predict patent filing volumes is very valuable for budgeting purposes.
* Current models are econometric models that use economic trends such as GDP and R/D expenditures from various large companies.
  + Not good at capturing small trends or “microtrends” – trends on a month to month basis, as the economic trends are oriented towards long term growth
  + Not good at capturing small business or novice patent filers, as the models focus on economy as a whole and large companies
  + This model is not accurate, especially in the last few years, and overestimate patent filing volumes
* Google trends -> interface made by Google, which will give the number of searches a particular query gets
  + Format is in a normalized query share – normalized meaning the maximum is scaled to 100, and query share meaning queries similar to it will be grouped with it as well
  + “Cost of Patent” and “Cost of a Patent”
* Hal Varian -> used google trends to forecast car sales
  + Used seasonal autoregressive model -> sales from month t uses month t-1, t-12, and the Google Trends information from the first week of month t
* My project – using Google Trends information in a seasonal autoregressive model to forecast patent volume predictions
* Datasets
  + PatEx dataset for previous patent filing volumes per month
  + Google Trends data
    - Queries used: : “Cost of Patent”, “Patent Application Process”, “Patent Application Search”, “USPTO”, “File for Patent”, “Patent Filing Fees”, “PatentsView”, “Utility vs. Design Patent”, and “EFS-web” (patent submission portal)
* Model: seasonal AR model
* Results
* Conclusion
* Acknowledgements