Lukas Gabriel Heisenberg Hager

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EDUCATION

University of Washington — Seattle, Washington
Ph.D. Student, Economics — September 2020 – Present
M.A., Economics — September 2020 – December 2022

University of Chicago — Chicago, Illinois
B.S., Mathematics with Specialization in Economics — September 2013 – June 2017
B.A., Economics
B.A., Germanic Studies

WORK EXPERIENCE

EntityRisk — Seattle, Washington
Data Science & Engineering Fellow — May 2022 – December 2022

- Wrote `python` package to calculate generalized risk-adjusted cost effectiveness of drugs using `numpy`
- Leveraged existing reports and academic literature to update existing cost-effectiveness estimates with risk-aversion
- Provided academic guidance on transitioning model concepts (i.e. certainty equivalents) from theory to real-world data

Cornerstone Research — San Francisco, California
Summer Data Analytics Consultant — June 2021 – August 2021

- Used `requests` and `BeautifulSoup` libraries in Python to automate user authentication and download of thousands of PDF files for an academic study, and sorted them using TF-IDF and k-means clustering
- Created feature for a web application which formatted Excel sheets for users, saving hours of manual labor per use

University of Michigan — Ann Arbor, Michigan
Data Scientist, Department of Pathology — November 2018 – April 2021

- Built predictive models using regularized linear regression and text clustering for anticipating high-volume workdays to ensure quick diagnosis turnaround
- Used patient outcome data to determine testing strategies that minimize the chance of low-value referrals to specialists
- Generated model to predict NAB test result given a patient's earlier testing outcomes using random forest model
- Created multiple Shiny applications to showcase model results and provide real-time metric tracking
- Built Pathology Department's internal COVID-19 tracking dashboard to extract and display real-time and historical testing numbers and positivity rates for departmental leadership

Cornerstone Research — San Francisco, California
Analyst — September 2017 – November 2018

- Cleaned data, ran regressions, and helped to created statistical models for cases involving assessing the validity of claims of gender discrimination within a major US retailer and assisting the Department of Justice in reviewing a potential merger
- Used IBM Netezza platform in engineering complex data build involving over three hundred million observations to run efficiently and without errors

TGG Group — Chicago, Illinois
Summer Associate — June 2016 – August 2016

- Built model to predict the future price of commodities based on 35 years of data and presented it to the client
- Cleaned and performed analyses on summons data to investigate whether or not a quota existed in the city's law enforcement department, one of which resulted in statistically significant results and was included in the final report

PROJECT WORK

Texas Justice Initiative — July 2020 – September 2021

- Automated the backend of the data cleaning model using Python and Google Sheets
- Worked on a report to analyze the dataset in depth and provide examples to users of how to leverage the TJI data

AWARDS

Roe Fellowship Recipient, James K. & Viola M. Hall Fellowship Recipient, Davis Scholar

SKILLS

Programming: R/RStudio/RShiny, SQL, Python/Pandas/Numpy, Git/GitHub, LaTeX