LINH-CHI PHAM

cpham2@conncoll.edu | Portfolio | GitHub | LinkedIn

EDUCATION

B.A. Connecticut College | Presidential Scholar — May 2024
Majors: Statistics & Data Science; Quantitative Economics — **Minor**: Computer Science — **GPA** 3.95
Awards: Best Intermediate Macroeconomics Student; DataFest 2022 Winner; Dean's High Honors
Courses: Statistical Machine Learning, Computing in R, Text Mining, Econometrics, Inter. Macro

EXPERIENCE

FEDERAL RESERVE BANK OF BOSTON | Summer Research Intern — Summer 2022

- Work with senior economists/policy advisors José Fillat and Christina Wang in the Macro Financial Group.
- Research, analyze lending risks and loan distribution of commercial real estates across property types and lien positions.
- Construct different variations of mortgage risk assessment metrics (i.e. Loan-to-Value ratio) from CoreLogic data.
- Write efficient R scripts to perform computations and data aggregation; prepare results in data tables/RMarkdown reports.
- Create static/interactive data visualizations to gain multifaceted insights, help inform and guide research directions.
- Identify and clean false inputs, detect inconsistencies in loan & property data with 4mil+ observations and 200+ variables.

CONNECTICUT COLLEGE, ECONOMICS | Summer Research Scholar — Summer 2022

- Research correlation between the frequency of Tweets about inflation/recession risks and real-time treasury yields data.
- Perform sentiment analysis, build topic modeling models on web-scraped Tweets with 200k+ obs and ~100 variables.
- Identify and analyze relationships between top-of-mind economic issues discussed on Twitter through word networks.

AMERICAN STATISTICAL ASSOCIATION | DataFest 2022 Participant — Spring 2022

- Analyzed raw dataset with 3m+ observations and 200+ variables on the outcomes of a Yale educational video game.
- Through in-depth statistical analysis and data visualization, detected inconsistent results across similar surveys.
- Won 'Best Business Application' for game redesign proposal on reducing misunderstanding & inaccurate biases.

PROJECTS

HEL DEFAULT RISK CALCULATOR | RStudio, RShiny

- Feature-engineered and built logistic regression models to predict home equity loan default probability at ~86% accuracy.
- Built an RShiny web app to rank customers based on default chances and generate automated bank loan decision.
- Gained insights, developed hypotheses on customers' behavior through exploratory data analysis & visualization.

MECHANICS BEHIND US INFLATION | RStudio, RMarkdown

- Built an interactive dashboard to visualize unemployment claims under various categories (industry, education, wages).
- Constructed a dataset from scratch using FRED & BLS series on main macro indicators (demand, supply, monetary policy).
- Through exploratory data analysis, formed hypotheses, validated causal relationships and current US economy dynamics.

PREDICTING MENTAL HEALTH IN TECH | RStudio, RShiny

- Built classification models to predict Tech workers' mental condition; final neural nets model yielded 87% accuracy.
- Detected the most significant predictor sets of mental illness through feature selection methods for model comparison.
- Cleaned a free-form survey data with 124+ variables, transformed inputs using one-hot encoding for neural networks.

SKILLS

Programming: R (Proficient), SQL, Python, Java, Stata
Technologies: RStudio, Jupyter, Git, Tableau, Visual Studio Code, Power BI, MS Office
Libraries (R): tidyverse, tidytext, dplyr, stringr, lubridate, shiny, plotly, highcharter, markdown, blogdown

EXTRA-CURRICULAR

Academic Tutor: Statistical Computing with R, Intro to Statistics, Intermediate Macroeconomics — Fall 2022
Active Member: Peggotty Investment Club; Data, Information & Society; Rethinking Economics — Fall 2021 -
Vice President: Ams Media Club, Hanoi-Ams Talent Festival, Socialet Project (Co-Founder) — 2018 - 2019
Interests: Piano, Acoustic Guitar, Photography, Creative Design