# **LINH-CHI PHAM**

□ cpham2@conncoll.edu □ Portfolio ○ GitHub in 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 Computing in R, Machine Learning, Econometrics, Inter. Macro/Micro, Text Mining

#### **EXPERIENCE** –

#### FEDERAL RESERVE BANK OF BOSTON | Summer Research Intern

Summer 2022

- Collaborated with economists in MacroFinance research on commercial real estate lending risks and loan distribution.
- Computed, validated a wide variation of mortgage risk metrics and relevant statistics on CoreLogic lien and property data.
- Designed, created diverse static and interactive R data visualizations to provide insights and inform research decisions.
- Transformed, queried and constructed sub-datasets for specific in-depth analysis on property types and lien positions.

## CONNECTICUT COLLEGE, ECONOMICS | Summer Research Scholar

Summer 2022

- Researched pairwise correlations between inflation, recession risk tweet frequency, yield spread and stock performance.
- Scraped, performed sentiment analysis and topic modeling on 200k+ real-time tweets from users and US news outlets.
- Identified and analyzed relationships between trending economic issues on Twitter through bigram word networks.

## AMERICAN STATISTICAL ASSOCIATION | DataFest 2022 Participant

Spring 202

- Analyzed raw datasets of 3m+ observations and 200+ variables on the outcomes of a Yale risk-behavior video game.
- Led a team of 6 to conduct in-depth statistical analysis, data visualization and contrast results across similar surveys.
- · Won Best Business Application for a game redesign proposal on reducing misunderstandings and inaccurate biases.

#### PROJECTS -

## HEL DEFAULT RISK CALCULATOR | RStudio, RShiny

Spring 2022

- Trained and cross-validated logistic regression models to predict home equity loan default probability with 86% accuracy.
- Built an RShiny app which classifies customers based on default risk and generates automated bank loan decision.
- Gained insights, developed hypotheses on customers' behavior through exploratory data analysis & visualization.

#### MECHANICS BEHIND US INFLATION | RStudio, RDashboard

Spring 2022

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

#### PREDICTING MENTAL HEALTH IN TECH | RStudio, RMarkdown

Spring 2022

- Built neural networks and logistic regression models to predict Tech workers' mental condition, yielded 88% accuracy.
- Detected the most significant predictor sets of workplace mental illness using feature and model selection techniques.
- Cleaned and transformed variables of a free-form survey data with 126 variables, accumulated observations across years.

### **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 MacroeconomicsFall 2022Active Member:Peggotty Investment Club; Data, Information & Society; Rethinking EconomicsFall 2021 -Organizations:AIESEC in Vietnam, Ams Media (Content Head), Socialet Project (Co-Founder)2018 - 2020

Artistic Interests: Piano, Acoustic Guitar, Photography, Creative Design