

Fang Li

Phone: (+1) 587-588-6630 | **Email:** fli7@ualberta.ca
Address: 9808 103ST NW, Edmonton, Alberta, T5K2G4
[LinkedIn](#) | [GitHub](#) | [Personal Page](#)

SUMMARY

Ph.D. in Economics and CFA/FRM candidate with a strong foundation in Economic. Combines extensive quantitative analysis and data science experience with advanced statistical and simulation techniques and programming skills. A recognized problem-solver known for strong technical acumen and an unwavering commitment to excellence.

EDUCATION

Ph.D. in Economics

University of Alberta | Edmonton, AB | GPA: 4.0/4.0

September 2021 - January 2025

Notes : Transferred from the Economics Ph.D. program at the University of Delaware (Newark, DE).

MS in Economics (Ph.D. transfer)

University of Delaware | Newark, DE | GPA: 3.95/4.0

September 2018 - May 2021

MS in Economics

Xiamen University | Xiamen, China

September 2014 - June 2017

BS in Finance (major), Bachelor of Law (minor)

Wuhan University | Wuhan, China

September 2010 - June 2014

INDUSTRIAL EXPERIENCE

ATB Financial | Edmonton, Canada

May 2024 - January 2025

Data Scientist (Intern), Credit Decision Group

- Responsible for parsing Equifax hard pull report's machine-readable parts into cleaned, well-structured datasets.
- Collected research literature on personal bankruptcy and pre-delinquency. Presented recent techniques for modeling personal bankruptcy and pre-delinquency to the group.
- Responsible for data cleaning and feature engineering to create well-structured datasets from various sources for predicting pre-delinquency.
- Developed a machine learning model from scratch to predict pre-delinquency in retail loans. This model leverages extensive data—including credit card usage behavior, personal characteristics of account holders, account information, and macroeconomic indicators—to forecast delinquent behavior. Its performance improved by 150% compared to the previous model.
- Communicated with various stakeholders regarding the model's performance and its application in risk management.

Manulife Insurance | Hong Kong SAR, China

May - September 2022

Investment Advisor, Summer Intern

- Collected the latest literature on machine/deep learning application in financial modelling, assisted the Director for initiating seminars on machine learning and financial modeling.
- Supported the Quant Research Team in driving the adoption of data analytics tools and advanced econometric techniques. Utilized statistical programming skills to help the Investment Advisory Team in revamping their analytical abilities and software.
- Assessed risk exposure and performance metrics to develop tailored investment proposals for clients, enhancing the advisory process and aligning recommendations with clients' financial objectives and risk tolerance.

Guosen Securities Co., Ltd. | Shenzhen, China

June - December 2016

IPO Analyst (Intern), Investment Banking Division

- Mentored by senior officers at the second largest investment bank in China (annual revenue of 6.8B). Hosted a 'Lunch and Learn' training session to help cross-functional team members learn more about financial modelling and Chinese accounting standards.
- Worked in a team to investigate the IPO prospectus and performed financial due diligence for a multi-billion-dollar cybersecurity firm. Walk-through tests to evaluate internal processes for potential risks, scrutinize process adequacy.
- Demonstrated proficiency in financial modeling, particularly IPO and equity valuation, showcasing strong business and technical acumen.

TECHNICAL SKILLS

Quantitative Skills: DSGE modeling, Structural Vector Autoregression (SVAR), Time Series modeling and forecasting, Macroeconometric, Bootstrapping and Simulation, Perturbation method, General Linear Model; Statistical learning, Machine Learning, Feature Engineering, XGBoost, Fama-Macbeth regression, backtesting, Web scraping

Programming Languages: Python, Java, Matlab, C++, Stata, L^AT_EX

Data Management: SQL, MySQL, Google BigQuery

Tools: Git, Dynare

Libraries: xgboost, Scikit-Learn, Scrapy/scrapy-redis, statsmodels, PyTorch, financepy, backtrader

CODING PROJECTS

PySVAR

- I developed a Python package for Structural Vector Autoregression (SVAR) estimation. The primary feature of this library facilitates SVAR model estimation in a manner akin to using sklearn. This enhancement simplifies the process for researchers, allowing them to utilize multiple identification methods in SVAR modeling more easily.
- Github: <https://github.com/fangli-DX3906/PySVAR>

Heterogeneous Agents Resources & toolKit (HARK) | University of Delaware

June - Spetember 2020

Assistant to Dr. Matthew White

- I actively contributed to the development of the master branch of the Heterogeneous Agents Resources and toolKit (HARK). My work involved programming search models using Python, which included a model featuring non-separable additive disutility of search and another model incorporating a discrete state for unemployment benefits.
- Github: <https://github.com/fangli-DX3906/HARK>

CERTIFICATES

CFA candidate (Level III exam passed)

FRM candidate (Part II exam passed)

AWARDS & SCHOLARSHIPS

Alberta Graduate Excellence Scholarship | University of Alberta

2023

High Pass in Micro- and Macroeconomics Ph.D. Comprehensive Exam | University of Delaware

2018, 2019

Outstanding Graduates | Xiamen University

2017

National Scholarship for Graduate Students | Ministry of Education, China

2015