# KEVIN PIERRE MOTT

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## EDUCATION

**Carnegie Mellon University** — Pittsburgh, PA
Tepper School of Business

Ph.D. in Financial Economics — *exp. May 2024*
Minor in Economic Computation

M.S. in Financial Economics — *May 2021*

**Northeastern University** — Boston, MA
B.S. in Mathematics — *May 2019*
Minors in Economics, Chinese Language

**Sichuan University** — Chengdu, China
Study Abroad — *Summer 2018*
Coursework in Chinese Language

## RESEARCH INTERESTS

*Topical:*
Life-cycle portfolio choice, asset pricing, macro-finance, public finance, demographics

*Methodological:*
Functional approximation: machine learning (neural networks), scientific computing

## WORK(S) IN PROGRESS

**Life-Cycle Student Debt and Asset Prices**
Student loan debt is one of the largest household liabilities in the United States, but structural macroeconomic models which include student debt as a financial security are lacking in the macro-finance literature. Under the assumption that households which borrow student debt have higher human capital (and therefore higher wages), I model student debt within a stochastic overlapping generations economy with multiple assets. With the key general equilibrium channels being (1) agents' need to finance retirement savings and (2) the productivity externality of higher education levels, I evaluate the asset pricing implications of the re-balancing of agents' portfolios resulting from counterfactual student debt policies. Using neural networks to approximate global policy functions, I contribute to the literature on (unsupervised) machine learning applications to macroeconomics and finance.

## CONFERENCES AND PRESENTATIONS

**Society for Economic Measurement** — Calgary, AB
Invited Speaker — *August 11-13, 2022*
Life-Cycle Student Debt and Asset Prices

## AWARDS AND HONORS

- Pittsburgh Supercomputing Center Resources Grant — *2022*
- TCS Presidential Fellowship, Carnegie Mellon University — *2021-2022*
- Dean's Research Fund, Carnegie Mellon University — *2020*
- William Larimer Mellon Fellowship, Carnegie Mellon University — *2019-2024*

## TECHNICAL SKILLS

| | |
|---|---|
| **Numerical Computing** | Julia, MATLAB |
| **Machine Learning** | Python (PyTorch, TensorFlow), XSEDE Supercomputing Resources |
| **Statistical Programming** | R, Python |
| **Tools** | LaTeX, Git(hub) |
| **Operating Systems & Scripting** | Linux Ubuntu (bash), macOS (zsh), Python |
| **Miscellaneous** | Microsoft Excel, SQL |
| **Languages** | English (native), Chinese (普通话, conversational) |

## TEACHING AT CARNEGIE MELLON UNIVERSITY

**Instructor**

*MBA:*

Advanced Microsoft Excel Workshop *Fall 2021, Spring 2022*

**Teaching Assistant**

*Undergraduate:*

Principles of Macroeconomics *Spring 2021, Fall 2021, Spring 2022*

Intermediate Macroeconomics *Fall 2021*

*MBA:*

Venture Capital and Private Equity *Spring 2021*

*PhD:*

Dynamic Competitive Analysis *exp. Fall 2022*

Microeconomics I *Fall 2021, exp. Fall 2022*

Econometrics I *Fall 2021*

## PERSONAL INFORMATION

Citizenship: United States of America

Interests: Classical music, weightlifting, hiking, history, literature

Native of Long Island, New York

August 11, 2022