

# Pouya Arab

pouyaa@andrew.cmu.edu

pouyaarab.github.io

## Education

---

### Carnegie Mellon University

*Doctor of Philosophy in Economics and Public Policy*

Aug 2024 – Present

*Pittsburgh, PA*

- GPA: 3.91/4

### Sharif University of Technology

*Master of Science in Economics*

Sep 2020 – Sep 2023

*Tehran, Iran*

- GPA: 4/4 (17.68/20)

### Sharif University of Technology

*B.Sc. in Mechanical Engineering, Minor in Economics*

Sep 2015 – Sep 2020

*Tehran, Iran*

- GPA: 3.77/4 (17.40/20)

## Interests & Skills

---

**Research Interests:** Environmental Economics, Urban Economics, Experimental Economics

**Software:** Stata, R, Python, MATLAB, ArcGIS, L<sup>A</sup>T<sub>E</sub>X

**Languages:** English (Fluent), Persian (Native)

## Working Papers

---

**Climate Change and Mortality: Evidence from Iran** (with M. Vesal).

*Working Paper.* Available [here](#).

## Research Experience

---

**PhD 1<sup>st</sup> Paper: Burning Signals: Wildfire Hazard Maps and Housing Market Reactions** Present

*Supervisors: Karen Clay, Akshaya Jha, Nicholas Muller, Edson Severnini*

- Illustrating the capitalization of wildfire risk into housing prices using a vertical sorting model.
- Utilizing staggered Difference-in-Differences to identify negative price effects driven by information shock in high-risk zones.
- Constructed a novel dataset of historical fire map designations by digitizing archival records from CAL FIRE.

**Master Thesis: Climate Change and Mortality: Evidence from Iran**

Sep 2021 – July 2023

*Supervisor: Mohammad Vesal*

- Analyzed the causal effect of temperature on mortality across 42 demographic groups using a rich weekly dataset (2009–2017) and two-way fixed effects models.
- Identified a significant "harvesting effect," showing that while extreme heat ( $>25^{\circ}\text{C}$ ) increases immediate mortality by 1.78%, the effect diminishes to 0.27% over longer horizons due to mortality displacement.

**Research Assistant, Data Analysis Center of the GSME**

Aug 2022 – Dec 2023

*Supervisors: Mohammad Vesal*

- Collected, analyzed, and visualized climate data to provide reports on climate change trends in Iran.

**Research Assistant: Digitization to Enhance Tax Compliance in Iran**

Nov 2020 – Sep 2021

*Supervisor: Mohammad Vesal*

- Conducted a comprehensive literature review on the role of digitization in improving tax compliance.

## ***Work Experience***

---

**Project Analyst**

Feb 2018 – Jan 2020

*Rahbord Danesh Pouya Institute (RDPI)*

*Tehran, Iran*

- Conducted economic and environmental impact assessments for national development planning, focusing on resource management.
- Facilitated Value Engineering workshops, including the assessment of the Casillian dam for drinking water supply.

## ***Teaching Experience***

---

**Graduate:** Environmental Economics, Energy Economics, System Dynamics, Applied Econometrics

**Undergraduate:** Macroeconomics, Microeconomics, Principles of Economics, Statistics and Probability

## ***Test Scores***

---

TOEFL iBT: 99 (Reading: 27, Listening: 25, Speaking: 23, Writing: 24)

GRE: Verbal Reasoning: 145, Quantitative Reasoning: 167, Analytical Writing: 4.0

## ***Leadership & Voluntary Experience***

---

**Sharif Economics Academic Association**

Aug 2021 – Aug 2023

*Board Member*

- Organized the international workshop "Climate Change Economics: Theory to Application", hosting lecturers from top global universities.
- Arranged several academic presentations and seminars for the department.

**Sharif Mountaineering Club Counsel**

Oct 2019 – Sep 2021

*President of the Board*

**Daad Student Publication**

Oct 2018 – Dec 2019

*Editorial Board Member (Economics and Environment)*

## ***Awards & Honors***

---

**Ranked 43<sup>rd</sup> Among 5,000+ Participants**

2020

*Graduate National University Entrance Exam*

**Winner of The Extracurricular Activities Award**

2019

*Student Affairs Administration of the Mechanical Engineering Department at SUT*

**Full Scholarship for TeIAS Summer Schools**

2018, 2019

*Tehran Institute of Advanced Studies (TeIAS)*