

Chao (Grace) Wang

Curriculum Vitae

6018 N Moon Crest Dr, Tucson, AZ 85718
+1 (520) 307-9993 (Text & Call)
chaowango827@email.arizona.edu
chaogracewang@gmail.com(Personal)
<https://sites.google.com/view/chaogracewang>
<https://www.linkedin.com/in/chaogracewang>

DOCTORAL RESEARCH

“Air Traffic and Urban Growth: Evidence from Airline Networks” (Job Market Paper)

My job market paper examines the causal effects of air traffic on local economic growth. Despite substantial government spending in airport infrastructure, there is little empirical research justifying this effect, especially in modern times. The main challenge is to deal with interdependence between air traffic and urban growth. Most literature exploits policy changes in the airline industry as instruments to estimate the causal effects, thus limit the analysis in 1940s-1970s. I apply Bartik shift-share to the airline networks and leverage local variation in air traffic stemming from connected hubs for small airports and operation airlines for large hubs. Because of unavailability of hub lists operated under the hub-and-spoke system, I cluster on percentage of passengers and routes connecting to an airport as transferring, a machine learning technique. My paper fills the gap in estimating causal effects of air traffic on local economic outcomes in modern times by airport category and instrument construction can be implemented simply and in any time period.

“A More Generalized Way - The Effect of Internal Migration on Local Labor Markets” (Working Paper)

“The Impact of Government Spending in Healthcare Sector on Labor Market” (Work in progress)

“The Effect of Internal Migration on Local Labor Markets from 1990 to 2016” (Work in progress)

COURSEWORK AND PROJECTS

Deep Learning, deeplearning.ai

Specialized in Convolutional Neural Networks and Sequence Models (Recurrent Neural Networks, Natural Language Processing);

Framework: TensorFlow, Keras

Machine Learning, Stanford University

Introduction to Algorithms, MIT OpenCourseWare

Research Bazaar; Software Carpentry Workshop; SAS Camp; Intro to HPC Workshop; Git/GitHub Workshop; GTA Online Course Design Boot Camp, The University of Arizona

TEACHING EXPERIENCE

Sole Instructor, The University of Arizona *Summer 2016-2019*
ECON 200 Basic Economic Issues, Online
Latest Student Evaluation: 4.5/5.0, 4.2/5.0

Teaching Assistant, The University of Arizona *2014-2019*
ECON 453 Data Analytics and Modeling, ECON 418 Introduction to Econometrics, ECON 340 International Economics and Policy, ECON 332 Intermediate Macroeconomics, ECON 300 Microeconomic Analysis for Business Decisions, ECON 200 Basic Economic Issues, ECON 150C1 An Economic Perspective

EDUCATION

The University of Arizona *2014 - May 2020*
Ph.D. in Economics (GPA: 3.9/4.0)

Renmin University of China *2011 - 2014*
M.S. in Economics (GPA: 3.9/4.0)

Southwestern Uni. of Finance and Econs. *2007 - 2011*
B.A. in Economics (GPA: 4.0/5.0)

SELECTED AWARDS AND HONORS

Graduate Assistantship *2014 - 2020*
Graduate Teaching Assistant Boot Camp Award *2018*
The University of Arizona

Graduate Student First-Class Scholarship *2011 - 2013*
Outstanding Graduate Students *2012*
Social Activities and Service Scholarship *2013*
Renmin University of China

Academic Excellency Scholarship *2008-2010*
People's Bank of China Scholarship *2010*
National Scholarship *2008*
Southwestern University of Finance and Economics

SOFTWARE SKILLS

EXPERT Stata, Python, Matlab, MySQL, \LaTeX
INTERMEDIATE SAS, R, ArcGIS, Git, Unix

PERSONAL INFORMATION

CITIZENSHIP China, US Permanent Resident (Processing)
LANGUAGE English (Fluent), Mandarin (Native)

REFERENCES

Price V. Fishback (Dissertation Advisor)

POSITION Thomas R. Brown Professor of Economics
EMPLOYER *The University of Arizona*
EMAIL pfishback@eller.arizona.edu

Tiemen Woutersen

POSITION Professor of Economics, Eller Fellow
EMPLOYER *The University of Arizona*

Teaching Assistant, Renmin University of China 2013-2014
Microeconometrics; Game Theory; Economics of Family Behavior

EMAIL woutersen@email.arizona.edu

Mauricio Varela

POSITION Assistant Professor of Economics
EMPLOYER *The University of Arizona*

EMAIL mvarela@email.arizona.edu

John Z. Drabicki

POSITION Assistant Department Head, Associate Professor of Economics
EMPLOYER *The University of Arizona*

EMAIL drabicki@eller.arizona.edu

REFERENCES

Price V. Fishback (Dissertation Advisor)

Thomas R. Brown Professor of Economics
The University of Arizona
pfishback@eller.arizona.edu

Tiemen Woutersen

Professor of Economics, Eller Fellow
The University of Arizona
woutersen@email.arizona.edu

Mauricio Varela

Assistant Professor of Economics
The University of Arizona
mvarela@email.arizona.edu

John Z. Drabicki

Assistant Department Head, Associate Professor of Economics
The University of Arizona
drabicki@eller.arizona.edu

SKILLS

Goal Oriented

I believe in action over long-winded discussions. I listen to everyone's viewpoints and use my judgement to immediately act based on consensus to achieve goals quickly and efficiently.

Physical Dexterity

Manual manipulation of experimental equipment and training within Black Mesa (e.g. the Hazard Course) have contributed to an enjoyment of working with my hands.

Passionate

I have been interested in theoretical physics such as quantum mechanics and relativity from an early age. My education and research have cemented this interest into a passion. I greatly enjoy carrying out fundamental physics research with potential practical applications.

PUBLICATIONS

Freeman, G. R. (1996). Chemistry of Multiply Charged Negative Molecular Ions and Clusters in the Gas Phase: Terrestrial and in Intense Galactic Magnetic Fields. *The Journal of Physical Chemistry*, 100(11), 4331-4338.

Jacobsen, F. M., Gee, N., **Freeman, G. R.** (1986). Electron mobility in liquid krypton as function of density, temperature, and electric field strength. *Physical Review A*, 34(3): 2329-2335.

1996 **doi:10.1021/jp951483+**

1990 **doi:10.1139/p90-097**

1986 doi:10.1139/v86-297

1986 doi:10.1103/PhysRevA.34.2329

First author publications in bold