Akshay Natteri Mangadu

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EDUCATION

The University of Chicago - Harris School of Public Policy
Chicago, USA

Master of Arts in Public Policy Analysis, Certificate in Research Methods   *Aug. 2017 – Dec. 2018*

- Masters program focusing on advanced econometric and statistical research methods in public policy analysis.
- Completed the first year of PhD coursework (Game Theory, Econometrics, and Microeconomics) at Harris.
- Recipient of **Harris-Mellon Scholarship**, GPA: 3.675/4.0.

The Chinese University of Hong Kong
Hong Kong SAR

Bachelor of Business Administration - Integrated Business   *Aug. 2013 – May 2017*

- Concentration in **Financial Engineering** and Minor in **Economics**, GPA: 3.68/4.0.
- Graduated with **First Class Honors** and Member of **Beta Gamma Sigma** honors society (awarded to business school students in the top 10% of the grade distribution).
- Awarded **Honours at Entrance** and received the **HKSAR Government Scholarship** for all four years.
- Placed on the **Dean's list** and **College Head's** list for three consecutive years - 2015, 2016, and 2017.
- Attended a summer program at the University of Cambridge.

TECHNICAL SKILLS

Data Analysis and Mathematical Modeling Tools

Stata (Advanced), **SAS** (Intermediate), **R** (Intermediate), **Excel VBA** (Advanced), **Python** - NumPy, Pandas, Seaborn, Matplotlib, Selenium and Plotly (Advanced), **Matlab/OCTAVE** (Advanced), **Bash Scripting** (Intermediate), and **C++** (Basic).

PROFESSIONAL AND RESEARCH EXPERIENCE

Deloitte Touche Tohmatsu India LLP
Delhi, India

Consultant   *May 2021 - Present*

- Consultant with the 'Economic Development and Urban Transformation' team at Deloitte India's consulting practice.

iVEIN Consortium - Indian Institute of Technology, Madras
Chennai, India

Assistant Research Editor   *Sep. 2020 - Feb. 2021*

- Co-authored articles with **Prof. Thillai Rajan A.** on angel investing, venture financing and funding of start-ups in India for the annual publication of the consortium. The articles explore key trends in venture financing in India and the evolution of the Indian angel investing landscape.

Harris School of Public Policy - University of Chicago
Chennai, India (Remote)

Research Assistant   *Apr. 2020 - Dec. 2020*

- Worked with **Prof. Bruce D. Meyer** on an academic study that explores trends in quality of housing for the middle class and poor in the United States. Performed advanced statistical analyses (variants of hedonic regressions) to isolate the dollar value of housing quality over time.

Athena Infonomics
Chennai, India

Associate Consultant   *Feb. 2019 - Mar. 2020*

- Developed a **financial planning** tool to help utilities in developing countries analyze and assess the performance of large-scale sanitation infrastructure projects for the **Bill and Melinda Gates Foundation**.
  * Led consultations in UK, Kenya and Zambia to understand the requirements for such a tool.
  * Built robust financial models to project viability of service providers over a long-term horizon based on detailed analysis of the sanitation business in each region.
  * Presented the progress at the International Water Association's Congress in Colombo.
- Analyzed survey data about the demand for piped water in Mandalay, Myanmar and co-authored a working paper about the findings, published by the **International Growth Center**.
- Designed primary survey instruments and analyzed survey data to understand the demand for retail housing loans that subsidize green homes (homes that are eco-friendly and resource efficient) for the **International Finance Corporation**.
- Co-authored an article on Development Impact Bonds which was published in the Business Standard.

Harris School of Public Policy - University of Chicago Chicago, USA

Research Assistant *Sep. 2017 - Jan. 2019*

- Served as a research assistant for a published academic study under **Prof. Bruce D. Meyer** about the impact of transfers on the well-being of the disabled.
- Helped in writing and updating the SAS codes used to run a set of Poisson regressions for the study. The paper was published in the National Bureau of Economic Research's Tax Policy and Economy Series. A more comprehensive study revolving around the same issues was published in the Journal of Public Economics.
- Worked on multiple projects dealing with the measurement of poverty and material well-being in the United States.

CUHK Economics Department Hong Kong SAR

Junior Research Assistant *Jun. 2015 - Jul. 2017*

- Served as a research assistant for **Prof. Wallace KC Mok** for a project funded by the Hong Kong Research Grants Council, aimed at providing pointers for a new approach to measuring poverty in Hong Kong.
- Researched on measuring the extent of poverty in the United States using the Panel Survey of Income Dynamics, a US household survey that tracks over 5000 households and their offshoots for more than 45 years. Analyzed income data of approximately 200,000 individuals in a given year between 1968 and 2015 from the Current Population Survey.

PROJECTS

Performance of Politicians with Criminal Background in India Harris, Jun. 2018

- Wrote a paper exploring if there were any performance differentials between politicians with criminal background and politicians without any background.
- Gathered data from various online sources about the criminal background of candidates in election and analyzed data from three parliamentary elections with over 12,500 observations in total using a regression discontinuity model.

Testing the Efficient Market Hypothesis - A Survey CUHK, Apr. 2017

- Wrote a review essay analyzing academic studies that tested the "Efficient Market Hypothesis" using various empirical strategies.

Application of the Finite Differences Method to Value Options CUHK, Dec. 2016

- Used Finite Differences Method (FDM) to solve for the price of European options under the Constant Elasticity of Variance (CEV) model. Wrote a note about the method.
- Wrote a Matlab function that uses the Crank Nicolson method to compute the price of a put or call option under the CEV model, with a choice of using uniform or non-uniform discretization patterns. Benchmarked code with the built in BLSPRICE command in Matlab (which is based on the Black-Scholes analytical solution) for the special case of constant variance.

TEACHING EXPERIENCE

Harris School of Public Policy, University of Chicago Chicago, USA

Teaching Assistant *Oct. 2018 - Dec. 2018*

- Served as a teaching assistant for **Advanced Statistics 1** (an introductory statistics course for Master of Public Policy and Master of Science in Computational Analysis and Public Policy students) taught by **Prof. Dan A. Black**.
- Held weekly review sessions and office hours, revisiting key concepts covered in lecture, answering students' questions and aided the instructor with administrative duties pertaining to the course.
- Graded exams and assignments submitted in the course.

RELEVANT COURSEWORK

Statistics and Economics

Statistical Theory and Methods (Graduate Level), Applied Econometrics (PhD Level), Advanced Microeconomics (PhD Level), Applied Game Theory (PhD Level), Stochastic Processes (Graduate Level) and Multivariate Statistics (Graduate Level).

Finance

Interest Theory and Finance (Undergraduate Level), Investment Analysis and Portfolio Management (Undergraduate Level), Options and Futures (Undergraduate Level), Fixed Income Securities (Undergraduate Level), Computational Finance (Undergraduate Level) and Intermediate Financial Theory (Undergraduate Level).

LANGUAGES, CITIZENSHIP

Languages - English (Bilingual Proficiency) and Tamil (Native).
Citizenship - Indian.