# KARUN ADUSUMILLI

Department of Economics University of Pennsylvania Philadelphia, USA

## **Academic Position**

2019-PRESENT UNIVERSITY OF PENNSYLVANIA Assistant Professor of Economics

2018-2019 University of Pennsylvania Lecturer

# **Education**

2018	London School of Economics  Doctor of Philosophy in Economics
2013	London School of Economics  MSc Econometrics and Mathematical Economics
2011	Indian Institute of Technology, Delhi B.Tech in Engineering Physics

# **Working Papers**

2022	Neyman allocation is minimax optimal for best arm identification with two arms, https://arxiv.org/abs/2204:05527 (2022), Updated: October 2022.
2022	How to sample and when to stop sampling: The generalized Wald problem and minimax policies, <i>Updated: October 2022</i> .
2021	Risk and optimal policies in bandit experiments, https://arxiv.org/abs/2112.06363 (2021), Submitted, Updated: August 2022.
2021	Temporal-difference estimation of dynamic discrete choice models, (joint with Dita Eckardt), arXiv preprint arXiv:1912.09509 (2021), Submitted, Updated: August 2022.
2021	Dynamically optimal treatment allocation using reinforcement learning, (joint with Friedrich Geiecke and Claudio Schilter), <i>Reject and Resubmit, American Economic Review.</i>
2021	Reweighted non-parametric likelihood inference for linear functionals, (joint with Taisuke Otsu and Chen Qiu), <i>Revise and Resubmit, Electronic Journal of Statistics</i> .
2021	Unobserved heterogeneity, grouped random effects, and the EAMP algorithm, <i>Updated: March</i> 2022.

## **Peer Reviewed Publications**

2018

Bootstrap inference for propensity score matching, *Updated: August 2022*.

Inference on distribution functions under measurement error, (joint with Daisuke Kurisu, Taisuke Otsu, and Yoon-Jae Whang), *Journal of Econometrics*, 2020, 215(1), pp. 131-164.
"Nonparametric instrumental regression with errors in variables", (joint with Taisuke Otsu), *Econometric Theory*, 2018, 34(6), pp. 1256-1280.
"Empirical Likelihood for random sets", (joint with Taisuke Otsu), *Journal of the American Statistical Association*, 2017, 112(519), pp. 1064-1075.

## **Work in Progress**

A reappraisal of the effects of class size on children's learning (joint with Francesco Agostinelli and Emilio Borghesan)

#### **Honors and Awards**

2021	Kravis Award for Undergraduate Teaching in Economics
2019	John Hicks prize for outstanding PhD Dissertation
2014	John Hicks prize for outstanding performance in MRes Economics
2013	Ely Devons prize for exceptional performance in MSc
2011	JN Tata endowment scholarship
2010	MITACS Globalink fellowship
2005	National Talent Search Scholarship (Govt. of India)

### Service

Reviewer for Review of Economic Studies, Econometric Theory, Journal of Business and Economic Statistics, Econometric Reviews, Journal of Econometrics, Quantitative Economics, IEEE Transactions on Signal Processing, Metrika, Journal of the American Statistical Association

### **Teaching Experience**

2021/22	$ \hbox{Econ 103 - Statistics for Economists; Econ 705 - Econometrics I: Fund; Econ 224 - Statistical learning and causal inference } \\$
2020/21	$ Econ\ 103 - Statistics\ for\ Economists;\ Econ\ 705 - Econometrics\ I:\ Fund;\ Econ\ 224 - Statistical\ learning\ and\ causal\ inference$
2019/20	Econ 103 - Statistics for Economists; Econ 705 - Econometrics I: Fund
2018/19	Econ 103 - Statistics for economists
2013/18	Teaching fellow - London School of Economics

#### **Presentations**

2022/23	Michigan State University, Bravo center workshop on the Economics of Algorithms (forthcoming), University of Pittsburgh (forthcoming), AEA-ASSA annual meetings (forthcoming)
2021/22	Boston University, LSE, AEA-ASSA annual meetings, Chamberlain seminar, Cowles conference in Econometrics
2020/21	UCLA, University of Chicago, University of Southern California, UCL, UC San Diego, NYU, INFORMS, AEA-ASSA annual meetings
2019/20	Vanderbilt, Yale, Brown, North Carolina State University, Bristol Econometrics study group, AEA-ASSA annual meetings
2018/19	Columbia, Penn State, University of Virginia, Princeton, Harvard-MIT, Greater New York Area econometrics conference, CEMMAP/UCL conference on Personalized treatment