Ajinkya Hemant Kokandakar

Email: ajinkya@stat.wisc.edu | Website | LinkedIn | **Mobile:** +1 (984) 209-8187

EDUCATION

- **University of Wisconsin-Madison, Madison WI** **(June 2020 - Present)**
  Ph.D. Statistics | *GPA: 3.895/4.0 (after end of Spring 2021)*

- **Duke University, Durham NC** **(Aug 2018 – May 2020)**
  M.S. Economics and Computation | *GPA: 3.881/4.0*

- **Birla Institute of Technology and Science, Pilani** **(Aug 2012 – July 2017)**
  B.E. (Hons.) Computer Science and M.Sc. (Hons.) Economics | *CGPA: 9.11/10*

PUBLICATIONS

- Challa, J. S., Goyal, P., Kokandakar, A., Mantri, D., Verma, P., Balasubramaniam, S., & Goyal, N. (2021). **Anytime clustering of data streams while handling noise and concept drift.** Journal of Experimental & Theoretical Artificial Intelligence, 1-31.
  - This publication incorporates work I did at the Advanced Data Analytics and Parallel Technologies Lab, BITS Pilani in 2016. Specifically, I designed and developed a multithreaded and distributed hierarchical anytime stream clustering algorithms (joint work with Dr. Jagat Sesh Challa, Dr. Poonam Goyal and Dr. Sundar Balasubramaniam)

RESEARCH EXPERIENCE

- **UW-Madison, Dept. of Biostatistics and Medical Informatics** **(June 2020 – Dec 2021)**
  Research Assistant, Advisors: *Dr. Menggang Yu, Dr. Guanhua Chen*
  - Working on developing a method for estimation of heterogenous treatment effects (HTE) that is robust to errors drawn from heavy-tailed distributions.

- **Duke University, Department of Economics** **(May 2019 – Feb 2020)**
  Research Assistant, Advisor: *Dr. Matthew Masten*
  - **Sensitivity analysis:** Conducted a literature survey of methods to assess the sensitivity of the treatment effect estimates to violations of the conditional ignorability assumption

- **Duke University, Department of Economics** **(June 2019 – Dec 2019)**
  Research Assistant, Advisor: *Dr. Giuseppe Lopomo*
  - **Procurement Auctions:** Characterized the optimal mechanism for procurement in the presence of bidders with financial externalities
  - **Research Assistance:** Proofread drafts of papers, verifying algebraic proofs using Maple, solving mechanism design problems formulated as linear programs using CPLEX, AMPL and MATLAB, assisting in setting up MTurk experiments

- **Duke University, Department of Economics** **(Jan 2019 – May 2019)**
  Research Assistant, Advisor: *Dr. Arjada Bardhi*
  - Simulated Gaussian processes using the GPML toolkit for MATLAB (joint work with Shizhen Chen, MA Economics student at Duke University)
  - Simulated Poisson Bandit Problems to calculate discounted occupancy measures for each arm

- **Reserve Bank of India, Jaipur** **(May 2016 – July 2016)**
  Summer Intern, Department of Statistics and Information Management
  - Analysed the distribution of food consumption expenditure in India and calculated the first order approximation of compensating variation associated with food price inflation for the deciles of the population based on income

ACADEMIC PROJECTS

- **Causal Bandits Literature Survey** **(Nov 2020 – Dec 2020)**
  Term Project for CS861: Theoretical Foundations of Machine Learning, UW Madison
  - Studied the literature on the stochastic multi-armed bandit setting (SMAB) with an underlying causal structure. Joint work with Subhojyoti Mukherjee

- **Cardinal Graph Aggregation: Possibility and Impossibility Conjectures** **(Oct 2018 – Dec 2018)**
  Term Project for COMPSCI 590.02: Computational Microeconomics, Duke University
  - Studied the problem of cardinal graph aggregation and explored its relationship with the social choice theoretic aggregation problems induced by various interpersonal comparability assumptions and invariance conditions (joint work with Haoming Li, Xiaonan Hong and Naman Jain)

- **Impact of US Unconventional Monetary Policy on the Indian Economy** **(Jan 2017 – May 2017)**
  Master's Thesis, Advisor: Dr. A.K. Giri, Department of Economics and Finance, BITS Pilani
  - Developed a structural vector autoregression model to estimate the impact of a reduction in the U.S. term spread on foreign investment inflows, real effective exchange rate, long-term yield and industrial production in India

- **Distributed Branch and Bound Algorithm** **(April 2016)**
  Term Project for Parallel Computing
  - Developed a parallelized version of branch-and-bound algorithm for commodity cluster with dynamic diffusion of workload across the network of nodes and leftist heap implementation of

work stealing queues for shared memory parallelism within a node

- **External Memory Data Structures Library for C++** **(Dec 2015)**
  - Designed and developed generic, stable and thread-safe persistent data structures on secondary storage for storing and processing large amounts of data; compliant with C++ STL interface

TEACHING EXPERIENCE

- Graduate Teaching Assistant for COMPSCI 370: Introduction to AI, Duke University
- Graduate Teaching Assistant for COMPSCI 201: Algorithms and Data Structures, Duke University
- Undergraduate Teaching Assistant: Principles of Economics; Fundamentals of Finance and Accounting; Securities Analysis and Portfolio Management; Data Structures and Algorithms, BITS Pilani

ACADEMIC ACHIEVEMENTS AND AWARDS

- 2018 Duke Economics Master's Scholar Award
- National Talent Search (NTS) Scholarship**,** 2008

WORK EXPERIENCE

- **Infosys Ltd., Bangalore** **(July 2017 – May 2018)**
  Specialist Programmer
  - Developed the telemetry and data analytics module for the company's internal learning platform

WORKSHOPS

- 2019 Duke-Northwestern Causal Inference Workshop

TECHNICAL SKILLS

- Languages and Software: C, C++, Python, Julia, R, MATLAB, Java, Mathematica, Maple, CPLEX, SQL, Excel, LaTeX, Git, Linux