Arkajyoti Bhattacharjee

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EDUCATION_____

The Ohio State University, Department of Statistics   Columbus, OH, USA
Doctor of Philosophy (Ph.D.) in Statistics   *Aug '22 - Ongoing*

- Graduate Teaching Assistant: *Aug '22 - Ongoing*
  - ○ Responsible for recitations, grading, tutoring, and assisting in R labs for undergraduate STAT courses.
- Relevant Coursework: Design of Experiments, Theory of the Linear Model, Advanced Statistical Theory I, II, Advanced Computational Statistics

Indian Institute of Technology Kanpur, Department of Mathematics and Statistics   Kanpur, UP, India
Master of Science in Statistics   *Sep '20 – Jun '22*

- Relevant Coursework: Statistical & AI Techniques in Data Mining, Time Series Analysis, Multivariate Analysis, Statistical Simulation & Data Analysis, MCMC.
- Awards: Academic Excellence Award (2020, 2021) (for the top 10% of the batch and having a CPI > 8.5/ 10)
- Leadership: Student Nominee in Departmental Undergraduate Committee; STAMATICS Coordinator

Presidency University, Department of Statistics   Kolkata, WB, India
Bachelor of Science (Honours) in Statistics   *Aug '16 – Jun '19*

PUBLICATIONS_____

Nash & **Bhattacharjee**, "A Comparison of R Tools for Nonlinear Least Squares Modeling", The R Journal, 2024

EXPERIENCES_____

Statistical Consulting Service, The Ohio State University   Columbus, OH, USA
Graduate Student Consultant   *May – Jul '23*

- Consulted on multi-disciplinary research projects across Computer Science, Speech and Hearing Science, Geography, Health and Rehabilitation Science, and Anthropology departments.

The R Project for Statistical Computing, Google Summer of Code, 2021   Remote
Student Developer   *Jun – Aug '21*
Mentors: Prof. John Nash (Univ. of Ottawa), Dr. Heather Turner (Univ. of Warwick)

- Developed an **R package nlsCompare** that compares the accuracy of model characteristics derived using existing or new R functions for nonlinear least-squares.
- Wrote **tests** for nlsj, an interim R package developed to improve *nls()* functionalities, to ensure robust code structure.
  View Project: https://summerofcode.withgoogle.com/projects/5154479671869440

Accenture Solutions Pvt. Ltd.   Remote
Data Science Analyst Intern   *May – Jul '21*

- Developed an **AutoML**-based tool with **GUI**, using Python and Dash, that allows users to:
  - use multiple data pre-processing methods and select among classical and state-of-the-art algorithms;
  - use **model optimization** and **model blending**, interactively visualize **model diagnostics** and make predictions based on the best-optimized model.

SKILLS_____

- Programming Languages and Software: R, Python, C, LaTeX

PROJECTS_____

Understanding Confidence Intervals in Adaptive Markov Chain Monte Carlo (AMCMC)   *Aug – Nov '21*

- Reviewed the literature on the kernel estimators of asymptotic variance and confidence intervals in AMCMC.
  - Verified conditions under which a **CLT** holds via simulation examples in R.