

# Arkajyoti Bhattacharjee

📄 [arkab-ds.github.io](https://arkab-ds.github.io) | ✉ [bhattacharjee.57@osu.edu](mailto:bhattacharjee.57@osu.edu) | 🌐 [ArkaB-DS](#) | 📌 [arkajyoti-aj](#)

## EDUCATION

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

- Statistical Consultant: May – July '23
  - Consulted on multi-disciplinary research projects across Computer Science, Speech and Hearing Science, Geography, Health and Rehabilitation Science, and Anthropology departments.
- 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

**Indian Institute of Technology Kanpur**, Department of Mathematics and Statistics  
*Master of Science in Statistics* Kanpur, UP, India  
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  
*Bachelor of Science (Honours) in Statistics* Kolkata, WB, India  
Aug '16 – Jun '19

## PUBLICATIONS

Nash and **Bhattacharjee**. A Comparison of R Tools for Nonlinear Least Squares Modeling, *The R Journal* (accepted '23)

## PROFESSIONAL EXPERIENCES

**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.