

Soumyakanti Pan

PHD CANDIDATE · DEPARTMENT OF BIOSTATISTICS

UCLA Fielding School of Public Health

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EDUCATION

University of California Los Angeles

PH.D., *Biostatistics*

Los Angeles, USA

2021 - 2025 (expected)

Indian Statistical Institute

M.STAT., *Statistics*

Kolkata, India

2019 - 2021

- First Division with Distinction

Indian Statistical Institute

B.STAT. (HONOURS), *Statistics*

Kolkata, India

2016 - 2019

- First Division

AWARDS & ACHIEVEMENTS

2024	Dissertation Year Award, UCLA Division of Graduate Education	USD 39,487
	USD 20,000 in fellowship & USD 19,487 in tuition grant	
2024	Summer Mentored Research Fellowship, UCLA Graduate Division	USD 6,000
2022	Summer Mentored Research Fellowship, UCLA Graduate Division	USD 6,000
2021	University Fellowship, UCLA Division of Graduate Education	USD 14,863
2016-2021	Stipend and contingency grant, Indian Statistical Institute	
2015	2nd position, Advanced Mathematical Ability Test, Calcutta Mathematical Society	

SCHOLARLY MANUSCRIPTS

PUBLISHED

1. **Pan, S.**, Das, D., Ramachandran, G., & Banerjee, S. (2024). Bayesian hierarchical modeling and inference for mechanistic systems in industrial hygiene. *Annals of Work Exposures and Health*, 68(8), 834–845. DOI: 10.1093/annweh/wxae061

PREPRINTS

2. **Pan, S.** & Banerjee, S. (2024). spStack: Practical Bayesian geostatistics using predictive stacking in R. DOI: (In Process) [🔗](#)
1. **Pan, S.**, Zhang, L., Bradley, J. R., & Banerjee, S. (2024). Bayesian inference for spatial-temporal non-Gaussian data using predictive stacking. DOI: 10.48550/arXiv.2406.04655

SOFTWARE

1. **spStack: Bayesian Geostatistics Using Predictive Stacking.** [🔗](#) [R](#) [📦](#)

Fast Bayesian inference for Gaussian and non-Gaussian geospatial models without using MCMC algorithms. This R package is written in C++ with calls to **FORTRAN** routines for optimized linear algebra operations. Available from [CRAN](#).

CONFERENCE PRESENTATIONS

4. **Theory and Foundations of Statistics in the Era of Big Data.** Tallahassee, USA, April 2024. *Poster.*
3. **The Bayesian Young Statisticians Meeting, *j-ISBA*.** Virtual Meeting, November 2023. *Short Talk.*
2. **Joint Statistical Meetings.** Toronto, Canada, August 2023.
Topic Contributed Paper session: Recent advances in uncertainty quantification for complex systems.
1. **UCLA-UCI-KAUST Meeting.** Los Angeles, USA, March 2023. *Talk.*

PROFESSIONAL EXPERIENCE

- 2021-Present **Graduate Student Researcher, UCLA Biostatistics**
- 2023-2024 **Teaching Assistant, UCLA Biostatistics**
- 2021-2023 **Special Reader, UCLA Biostatistics**
- 2019-2021 **Instructor for Competitive Mathematics, RKMV Narendrapur**
- 2019 **Short-term Trainee, National Institute of Biomedical Genomics, India**

RESEARCH EXPERIENCE

UCLA - Department of Biostatistics *Los Angeles, USA*
ADVISOR: PROF. SUDIPTO BANERJEE *Sep. 2021 - Present*

- Dissertation: “Bayesian Modeling and Inference for Complex Dependent Non-Gaussian Data”

Indian Statistical Institute - Human Genetics Unit *Kolkata, India*
ADVISOR: PROF. SAURABH GHOSH *2020-2021*

- Masters Thesis: “Distribution-free correlation based tests to differentiate between related populations”

National Institute of Biomedical Genomics *Kalyani, India*
ADVISOR: DR. SAMSIDDHI BHATTACHARJEE *2019*

- Title: “Nonparametric estimation of alternate density for mixture modeling with applications to large-scale multiple testing in genomics”

TEACHING EXPERIENCE

- Spring 2024 **BIOS 250C: Multivariate Biostatistics, Teaching Assistant** *UCLA*
- Winter 2024 **BIOS 250B: Linear Statistical Models, Teaching Assistant** *UCLA*
- Fall 2023 **BIOS 241: Spatial Modeling and Data Analysis, Teaching Assistant** *UCLA*
- Fall 2021, 22 **BIOS 255A: Measure Theoretic Probability, Special Reader** *UCLA*
- Winter 22,23 **BIOS 255B: Advanced Probability and Statistics, Special Reader** *UCLA*
- 2019-2021 **Topics in Competitive Mathematics, Instructor, RKMV Narendrapur** *India*

TECHNICAL SKILLS

Programming **R, C++, and integration via R's Native Interface, Julia**

Other **Cluster Computing, Git, CI, UNIX-command line, LaTeX**

OUTREACH & PROFESSIONAL DEVELOPMENT

PROFESSIONAL MEMBERSHIPS

- International Society for Bayesian Analysis (ISBA).
- American Statistical Association (ASA).
- International Indian Statistical Association (IISA).

PEER REVIEW

- Annals of Applied Statistics.