

Shubhadeep Chakraborty

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EMPLOYMENT

Senior Manager, Statistical Methodology, BRISTOL MYERS SQUIBB, USA 2022 - till date
Postdoctoral Scholar, UNIVERSITY OF WASHINGTON, SEATTLE, WA, USA 2020 - 2022
Supervisor : Dr. Ali Shojaie

EDUCATION

Ph.D in Statistics, TEXAS A&M UNIVERSITY, COLLEGE STATION, TX, USA 2015 - 2020
Supervisor : Dr. Xianyang Zhang
GPA : 4.0
M.Stat, INDIAN STATISTICAL INSTITUTE, KOLKATA, INDIA 2013 - 2015
Specialization : Biostatistics & Data Analysis
Aggregate Marks : 74.95 %
B.Sc in Statistics, R.K.MISSION RESIDENTIAL COLLEGE, NARENDRAPUR (affiliated to University of Calcutta, India) 2010 - 2013
Aggregate Marks : 89.375 %

RESEARCH INTERESTS

- Nonparametric Statistics
- High-Dimensional Statistics
- Offline and Online Change-Point Detection
- Sequential Analysis
- Graphical Modeling
- Causal Inference
- Predictive Modeling

DISTINGUISHED ACADEMIC AWARDS

- **Humboldt Research Fellowship for Postdoctoral Researchers** from the ALEXANDER VON HUMBOLDT FOUNDATION, Germany, to carry out long-term research at a research institution in Germany. (Declined) 2020
- **Distinguished Graduate Student Award for Excellence in Teaching** from the ASSOCIATION OF FORMER STUDENTS (AFS), Texas A&M University, College Station, TX, USA, in recognition of outstanding academic record and contributions in teaching. 2019
- **Sabyasachi Roy Memorial Gold Medal Award** from INDIAN STATISTICAL INSTITUTE, Kolkata, India, for the best project work of the M.Stat program (2013-2015). 2015

OTHER ACADEMIC AWARDS

- **Dr. Joseph Newton Graduate Student Service Award** from COLLEGE OF SCIENCE, Texas A&M University, College Station, TX, USA, in recognition of distinguished service to Texas A&M University and exemplary academic performance. 2018
- **Anant M. Kshirsagar Endowed Fellowship in Statistics** from the DEPARTMENT OF STATISTICS, TEXAS A&M UNIVERSITY at the Joint Statistical Meetings (JSM 2017) at Baltimore, Maryland, USA, in recognition of outstanding academic performance. 2017
- **Prof. Anil Bhattacharya Memorial Best Student of Statistics Award** from R.K.MISSION RESIDENTIAL COLLEGE, NARENDRAPUR, India. 2013

STUDENT PRESENTATION AWARDS

- **R. L. Anderson Student Poster Award** from SOUTHERN REGIONAL COUNCIL ON STATISTICS (SRCOS) at the SRCOS Summer Research Conference Student Poster Competition at Carrolton, Kentucky, USA. 2019
- **Best Presentation Award** at the 2019 ANNUAL MEETING of the STATISTICAL SOCIETY OF CANADA (SSC) at University of Calgary, Calgary, Canada. 2019
- **3rd Prize** in the SOUTHEASTERN TEXAS CHAPTER OF THE AMERICAN STATISTICAL ASSOCIATION (SETCASA) Poster Competition at College Station, Texas, USA. 2019
- **R. L. Anderson Student Poster Award** from SOUTHERN REGIONAL COUNCIL ON STATISTICS (SRCOS) at the SRCOS Summer Research Conference Student Poster Competition at Virginia Beach, Virginia, USA. 2018
- **Gold Prize** in SOUTHEASTERN TEXAS CHAPTER OF THE AMERICAN STATISTICAL ASSOCIATION (SETCASA) Poster Competition at College Station, Texas, USA. 2017

TRAVEL AWARDS

- **Boyd Harshbarger Student Travel Award** from SOUTHERN REGIONAL COUNCIL ON STATISTICS (SRCOS) for attending the SRCOS Summer Research Conference at Carrolton, Kentucky, USA. 2019
- **Boyd Harshbarger Student Travel Award** from SOUTHERN REGIONAL COUNCIL ON STATISTICS (SRCOS) for attending the SRCOS Summer Research Conference at Virginia Beach, Virginia, USA. 2018
- **George Bush Presidential Library Foundation & OGAPS Travel Grant** from TEXAS A&M UNIVERSITY, USA, for attending the 4th CONFERENCE OF THE INTERNATIONAL SOCIETY FOR NONPARAMETRIC STATISTICS (ISNPS) at Salerno, Italy. 2018

SCHOLARSHIPS, FELLOWSHIPS & OTHER ACHIEVEMENTS

- **James Goodlett Fellowship** from TEXAS A&M UNIVERSITY, USA. 2015-16
- **OGAPS Dean's Doctoral Fellowship** from TEXAS A&M UNIVERSITY, USA. 2015-16
- **Debesh-Kamal Scholarship** from RAMAKRISHNA MISSION INSTITUTE OF CULTURE, Kolkata, India (awarded to deserving candidates for the purpose of higher education/research abroad). 2015
- Obtained **All India Rank 2** in the Joint Admission Test (JAM) conducted by the Indian Institute of Technology (IIT) for the Masters program in Statistics. 2013
- **INSPIRE Scholarship** from the MINISTRY OF SCIENCE AND TECHNOLOGY, GOVERNMENT OF INDIA, for being among the top 1% students of the nation in the 12th standard exam). 2010
- **Ranked 13th** in the Higher Secondary (12th standard) examination among nearly 5,00,000 candidates in the state of West Bengal, India. 2015-16

PUBLICATIONS (PUBLISHED/ACCEPTED/SUBMITTED)

- **Chakraborty, S.** and Shojaie, A. (2022). "Nonparametric causal structure learning in high dimensions". *Entropy*, 24 (3) 351. (pdf)
- **Chakraborty, S.** and Zhang, X. (2021). "High-dimensional Change-point Detection Using Generalized Homogeneity Metrics". arXiv:2105.08976. (pdf)
- **Chakraborty, S.** and Zhang, X. (2021). "A New Framework for Distance and Kernel-based Metrics in High Dimensions". *Electronic Journal of Statistics*, 15 (2) 5455-5522. (pdf)

- **Chakraborty, S.** and Zhang, X. (2019). “Distance Metrics for Measuring Joint Dependence with Application to Causal Inference”, *Journal of the American Statistical Association*, 114 (528) 1638-1650. (pdf).

INVITED PRESENTATIONS

- **Invited Talk** at 'StatScale', a collaboration between Lancaster University and University of Cambridge, UK (virtual). Jan, 2023
- **Invited Talk** at the 24th International Conference on Computational Statistics (COMPSTAT 2022) (virtual). Aug, 2022
- **Topic Contributed Talk**, at the Joint Statistical Meetings (JSM 2022) at Washington DC, USA. Aug, 2022
- **Invited Talk** at the 5th International Conference on Econometrics and Statistics (EcoSta 2022) (virtual). June, 2022
- **Invited Talk** at the 14th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2021) (virtual). Dec, 2021
- **Invited Talk** at the 63rd ISI World Statistics Congress (ISI WSC 2021) (virtual). July, 2021
- **Invited Talk** at the Department of Statistics, University of Washington at Seattle, Washington, USA (virtual). May, 2021
- **Invited Talk** at the 13th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2020) (virtual). Dec, 2020
- **Invited Talk** at the Department of Biostatistics, University of Washington at Seattle, Washington, USA. Feb, 2020
- **Invited Talk**, at the Department of Statistical Sciences, University of Padova, Padova, Italy. Sep, 2019
- **Invited Poster Presentation**, at the 4th Workshop On Goodness-of-fit, Change-point and related problems (GOFCP) at University of Trento, Trento, Italy. Sep, 2019
- **Invited Talk**, at the Joint Statistical Meetings (JSM 2019) at Denver, Colorado, USA. Aug, 2019
- **Invited Talk**, at the 4th Conference of the International Society for Nonparametric Statistics (ISNPS 2018) at Salerno, Italy. June, 2018

TEACHING EXPERIENCE

- Graduate level
 - **BIOST 544 (Introduction to Biomedical Data Science)**, Department of Biostatistics, University of Washington. 29 students enrolled with class evaluation of 4.3/5. Autumn 2022
 - **Metric Spaces, Linear Algebra and Regression Analysis** in BOOTCAMP 2019 (offered for the incoming PhD students of Fall 2019), Department of Statistics, Texas A&M University. Summer 2019
 - **Metric Spaces, Linear Algebra and Regression Analysis** in BOOTCAMP 2018 (offered for the incoming PhD students of Fall 2018), Department of Statistics, Texas A&M University. Summer 2018
- Undergraduate level
 - **STAT 211 (Principles of Statistics I)**, Department of Statistics, Texas A&M University. 95 students enrolled with class evaluation of 4.5/5. Fall 2019
 - **STAT 303 (Statistical Methods)**, Department of Statistics, Texas A&M University. 97 students enrolled with class evaluation of 3.7/5. Spring 2018

- **STAT 211 (Principles of Statistics I)**, Department of Statistics, Texas A&M University. 58 students enrolled with class evaluation of 4.0/5. Fall 2017
- **STAT 303 (Statistical Methods)**, Department of Statistics, Texas A&M University. 45 students enrolled with class evaluation of 4.1/5. Summer 2017

REFeree EXPERIENCE

Scandinavian Journal of Statistics, Journal of Nonparametric Statistics, Journal of Statistical Computation and Simulation, Journal of Multivariate Analysis, Open Statistics, The Annals of Statistics, Statistics in Medicine, Electronic Journal of Statistics, The Canadian Journal of Statistics, Computational Statistics and Data Analysis, Transactions on Knowledge and Data Engineering, Journal of Machine Learning Research, Journal of the American Statistical Association, TEST.

ORGANIZING EXPERIENCE

- **Invited paper session (*upon invitation*)** - on “*Recent Developments in High Dimensional Statistics*” at the 15th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2022) (virtual). Dec 2022
- **Invited paper session (*upon invitation*)** - on “*Recent Developments in Change-Point Detection Methods*” at the 14th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2021) (virtual). Dec 2021
- **Invited paper session (*upon invitation*)** - on “*Recent Advancements in High-Dimensional Statistics*” at the 13th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2020) (virtual). Dec 2020
- **Invited paper session** - on “*Recent Advancements in Distance and Kernel Based Metrics and Related Learning Methods*” at the Joint Statistical Meetings (JSM 2019) at Denver, Colorado, USA. Aug 2019
- **Invited paper session (*upon invitation*)** - on “*Recent Developments in Dependence Metrics and Their Applications*” at the 4th Conference of the International Society for Nonparametric Statistics (ISNPS 2018) at Salerno, Italy. June 2018
- **‘Statcafe’** - weekly departmental student seminars at the Department of Statistics, Texas A&M University, USA. 2017-18

CHAIR EXPERIENCE

- **Session Chair** - of an invited paper session on “*Advance Statistical Tools for Modern High Dimensional Data*” at the 14th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2021) (virtual). Dec 2021
- **Session Chair** - of an invited paper session on “*Recent Developments in Dependence Metrics and Their Applications*” at the 4th Conference of the International Society for Nonparametric Statistics (ISNPS) at Salerno, Italy. June 2018

COMMITTEE SERVICE

- **Scientific Programme Committee** - at the 15th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2022) (hybrid). Dec 2022

- **Quality of Life Committee** - (an Internal Standing Committee) at the GRADUATE AND PROFESSIONAL STUDENT COUNCIL (GPSC), Texas A&M University, USA. 2016-17

LEADERSHIP ACTIVITIES

- **President** of the STATISTICS GRADUATE STUDENT ASSOCIATION (SGSA), Department of Statistics, Texas A&M University, USA. 2019-20
- **Founding President** of TEXAS A&M UNIVERSITY ASA STUDENT CHAPTER, USA. 2019
- **Vice President** of the STATISTICS GRADUATE STUDENT ASSOCIATION (SGSA), Department of Statistics, Texas A&M University, USA. 2018-19
- **Secretary and Social Chair** of the STATISTICS GRADUATE STUDENT ASSOCIATION (SGSA), Department of Statistics, Texas A&M University, USA. 2017-18
- **Delegate** of the Department of Statistics at the GRADUATE AND PROFESSIONAL STUDENT COUNCIL (GPSC), Texas A&M University, USA. 2016-17

TECHNICAL SKILLS

- **Statistical Softwares** : R (proficient), Python (basic)
- **Others** : \LaTeX , MS-Office