

8th INTERNATIONAL CONFERENCE ON THE ROLE OF STATISTICS AND DATA SCIENCE IN 4IR (ICRSDS4IR)

Department of Statistics, University of Rajshahi, Bangladesh

December 26 – 28, 2024



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CALL FOR PAPER

Academics, scientists, and researchers are cordially invited to submit extended abstracts within 4 pages. To submit a research paper or e-poster, please visit the conference website at http://icrsds4ir.ru.ac.bd

Overview

The Fourth Industrial Revolution (41R or Industry 4.0) is an ongoing procedure of employing new smart technology to automate traditional manufacturing and industrial operations. The digital revolution has brought about unprecedented change in the manufacturing system. Ensuring information security while maintaining ongoing connectivity to the internet and other technologies is a major challenge. Our top priority should be cultivating skilled human resources aligned with the demands of the fourth industrial revolution to harness its full potential. Undoubtedly statistics play a pivotal role in data analysis, serving as the cornerstone for data science transformation. The upcoming 41R conference in December 2024 aims to gather global professionals, fostering discussions on advancements in critical fields and providing a platform for exchanging ideas. This event offers a unique opportunity to forge new connections and engage with experts across diverse disciplines, exploring the fundamentals, applications, and products driving the Fourth Industrial Revolution forward.

Objectives of the Conference

Navigating 4IR Goals: Delve into the opportunities and challenges presented by the 9 pillars of the Fourth Industrial Revolution (4IR), particularly in domains like business data science, health data science, Internet of Things (IoT), artificial intelligence (AI) based systems, 3D printing, and cloud computing.

Interdisciplinary Fusion: Explore the intricate connections between statistics, computer science, and social science in the face of rapid technological advancements.

Empowering Innovation: Drive innovation, enhance decision- making processes, and address challenges within the 41R framework by showcasing professionals across diverse industries' statistics and data science involvement.

Collaborative Exchange: Fostering collaborative initiatives that harness the collective potential of these fields for the benefit of 41R-driven advancements through a platform for the exchange of ideas.

Missions of the Conference

- Cultivate dialogues on the pivotal roles of data scientists and statisticians in spearheading innovation and keeping pace with technological advancements.
- Investigate educational initiatives and training 0 programs designed to equip professionals for the dynamic challenges presented by swiftly advancing technologies.
- 0 Create an academic platform for knowledge dissemination and sharing of knowledge and expertise of scholars from diversified areas.
- Identify data science applications in real-world 0 issues and our day-to-day lives in potentially relevant domains.
- Execution of a range of machine learning and 0 statistical algorithms that uncovered hidden patterns and trends in a large volume of data for decision-making.

Major Focusing Areas

The conference covers a broad range of topics including, but not limited to, the following.

- o Agricultural Statistics
- Artificial Intelligence 0
- Autonomous Robotics 0
- **Big Data Analytics** 0
- o Bioinformatics
- **Biomedical Informatics** 0
- Biostatistics
- Cybersecurity 0
- Cloud Computing 0

- o Data Mining Data Science 0
- Demography 0
- **Environmental Statistics**
- 0 o Epidemiology
- o Health Statistics
- o Image Processing Industrial Statistics
- 0
- Internet of Things 0

- Machine Learning
- **Reliability Statistics** 0
- Sampling and Expt. Design 0
- Statistical Inference 0
- Statistical Modeling 0
- Simulation & Modeling 0
- Statistical Software
- Time Series Modeling

Keynote Speakers

- <u>Madhumita (Bonnie) Ghosh-Dastidar</u>, PhD, Head, RAND Statistics Group and <u>President of the American Statistical</u> <u>Association</u> (ASA), USA
- <u>Prof. Mir Masoom Ali</u>, PhD, George and Frances Ball Distinguished Professor of Statistics Emeritus and Professor Emeritus of Mathematical Sciences, Ball State University, USA
- <u>Prof. Shahjahan Khan</u>, PhD, Vice Chancellor, Asian University of Bangladesh, and Emeritus Professor, University of Southern Queensland, Australia
- Prof. Aditya Bagchi, PhD, Professor Emeritus, Ramakrishna Mission Vivekananda University, India

Plenary Speakers

- Prof. Bhramar Mukherjee, PhD, University of Michigan, USA
- <u>Prof. Abdus S. Wahed</u>, PhD, University of Rochester, USA
- Prof. B.K. Sinha, PhD, ISI, Kolkata, India
- Prof. M. Kaykobad, PhD, BUET, Bangladesh
- Prof. Haseena Khan, PhD, UGC Professor, University of Dhaka, and UGC Member, Bangladesh.

Invited Speakers

• To be announced soon.

Organizing Committee

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• Prof. Dr. Md. Asaduzzaman Shah, *Department of Statistics, University of Rajshahi, Bangladesh* Cell: +88-01556312554, E-mail: azs61@yahoo.com

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- Prof. Dr. Md. Rezaul Karim, *Chairman, Department of Statistics, University of Rajshahi, Bangladesh* Cell: +8801726433752, E-mail: mrkarim@ru.ac.bd

Secretary

• Prof. Dr. Md. Mesbahul Alam, *Department of Statistics, University of Rajshahi, Bangladesh* Cell: +88-01920501247, E-mail: conf2024.stat@ru.ac.bd

Members

• To be added soon

International Advisory Committee Convener

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- Shofiqul Islam, PhD, McMaster Univ., Canada
- Rafiqul Chowdhury, PhD, CBU, Canada

Registration Fee

	Professional	Student	Accompany
Inland	BDT 4000	BDT 2000	BDT 2000
SAARC Countries	USD 150	USD 75	USD 75
Other Countries	USD 200	USD 100	USD 100

Registration Benefit

o Conference kits

- o Refreshments, Conference Lunch and Dinner
- Certificate
- All conference documents including Abstract Book/Proceeding.

Note:

- At least one author of an accepted paper/poster must register to publish the abstract in the conference proceeding/abstract book.
- The presenting author must be a registered participant.
- Please visit the conference website http://icrsds4ir.ru.ac.bd/ for extended abstract submission and registration details.
- o Selected papers will be published in peer-reviewed and/or special issues of scientific journals.

Best Student Paper Award

Three best student paper awards will be given to the most outstanding student papers presented at the conference.

Important Dates

Deadline for Paper Submission	:	October 03, 2024
Notification of Acceptance	:	November 20, 2024
Deadline for Registration	:	December 02, 2024

About the Department of Statistics

Department of Statistics at the University of Rajshahi, Bangladesh is one of the oldest, having expanded since its inception in 1961. With 24 full-time faculty, 21 administrative personnel, and roughly 100 and 400 students in graduate and undergraduate programs, respectively, the department offers outstanding teaching and research facilities. The department provides a welcoming environment for both faculty and students, with a seminar library containing approximately 10,000 main books and reference books related to the department's courses in the curriculums, as well as two computer laboratories equipped with over 200 current personal computers, multimedia projectors, and smart interactive boards. department The supports high-achieving undergraduates with thesis opportunities in Master of Science (M.Sc.) programs, and nearly all of them are awarded National Science and Technology (NST) grants from the Ministry of Science and Technology, Bangladesh. Aside from that, the department offers 25 categories of scholarships for both undergraduate and master's degrees, with distinct categories based on the student's merit standing. Notably, it supports 16 research groups and 25 M.Phil./Ph.D. research students, demonstrating a strong dedication to academic achievement. Additionally, it offers a certificate course in statistical computing, taking three

intakes each year, for researchers and professionals from other disciplines. The department has granted over 60 M.Phil./Ph.D. degrees, hosted seven international conferences on every three years basis, and welcomed more than 150 foreign scholars and professors. The department has been publishing an academic journal named International Journal of Statistical Sciences (USS) annually since 2002 with an ISSN 1683-5603.

About Rajshahi

Rajshahi, which is both a district and divisional metropolitan city, flourished in the late eighteenth century. The beginnings of the modern Rajshahi as a district can be traced in 1825. The tomb of Hazrat Shah Makhdum (1635) is located at Dargapara. Many European traders were attracted to this town because of it being a center of silk production and its location be the side of river Padma, subsequently the Dutch, the French and the British East India company established their business houses here. Rajshahi Municipality was established in 1876. The town was developed with the establishment, of many educational Institutions including Rajshahi University (1953), Rajshahi University of Engineering and Technology (1964), Police Academy (1912), Rajshahi Medical College (1949), Rajshahi Collegiate School (1828), PN Girls High School (1886), Rajshahi Govt.

Madrasa (1874), Rajshahi BΒ (Bholanath Bishweshwar) Hindu Academy (1898) and Rajshahi College (1873) were some of the main centers of higher education for the inhabitants of East Bengal, North Bengal, Bihar and Assam of former India. Rajshahi is known as "Silk City", especially renowned for its silk products, different kinds of mangoes, produced in Rajshahi are countrywide famous for their unique taste. The earliest museum in Bangladesh, named Varendra Research Museum, was established in this city in 1910. Its rich collections contain interesting objects of past Hindu, Buddhist and Muslim heritage. In the list of the rich architectural heritage of the district of the Choto Sona Mosque at Gaur area of the time of Allauddin Hussain Shah (1519-1532), Kusumba Mosque of the time of Ghiyasuddin Bahadur Shah Sur (1556-1560) and Bagha Sami Mosque of the time of Sultan Nusrat Shah (1523-1524) are worth mentioning.

Climate of Rajshahi

During December, Rajshahi City experiences an average daily temperature ranging from a mild 11°C to a pleasant 25°C, creating a comfortable and easygoing environment, ideal for relaxed and casual attire.

Transport (Dhaka to Rajshahi)

Air Connectivity: Shah Makhdum Airport, located 10 kilometers north of Rajshahi City; Three daily passenger flights by Biman Bangladesh Airlines, Novo Air, and US-Bangla Airlines.

Bus Services: Approximate travel time of 6 hours; Luxury buses operated by Desh Travels, National Travels, Grameen Travels, and Hanif Enterprise.

Train Routes: Five distinct trains connecting Dhaka to Rajshahi Division; including Silkcity Express (754), Padma Express (760), Dhumketu Express (770), Banalata Express (792) non-stoppage, and Madhumati Express (756).

Venue

- Inauguration: Shahid Tajuddin Ahmad Senate Building, University of Rajshahi, Bangladesh
- Technical Sessions: Department of Statistics, University of Rajshahi, Bangladesh

Organized by

The Department of Statistics, University of Rajshahi, Rajshahi – 6205, Bangladesh

Contact Person

Prof. Dr. Md. Mesbahul Alam Conference Secretary Cell: +88-01920501247 E-mail: conf2024.stat@ru.ac.bd For more information, please visit the conference webpage <u>http://icrsds4ir.ru.ac.bd</u>





