



2nd International Conference on Machine Learning and Big Data Analytics (ICMLBDA) 2022

12-13th March 2022

In Collaboration with

Indian Institute of Information Technology
(IIIT) Kota - India

Indian Institute of Technology, Patna, India

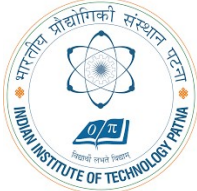
Indian Institute of Technology (BHU) - Varanasi, India

California State University, San Bernardino, USA

Emlyon Business School - France

Research Institute of Big Data Analytics – Xi'an Jiaotong-
Liverpool University- China

<https://icmlbda2022.iaasse.org/index.html>



Post-Conference, Proceedings will be made available to the following Indexing services for Possible inclusion, **All accepted and presented** papers of the conference will be reviewed for possible publication in **SCOPUS indexed SPRINGER LNNS**.

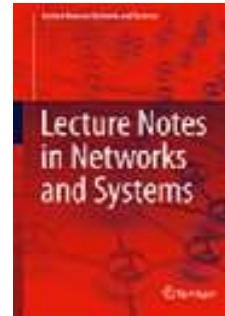
ISI Conference Proceedings Citation Index

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About Conference

2nd International Conference on Machine Learning and Big Data Analytics (ICMLBDA) 2022 provides a platform for researchers and professionals to share their research and reports of new technologies and applications in ML and Big Data Analytics like Biometric Recognition System, Medical Diagnosis, Industries, Telecommunications, Artificial Intelligence, Artificial Intelligence Petri Nets Model-Based Diagnosis, Gaming, Stock Trading, Intelligent Aerospace Systems, Robot Control, Law, Remote Sensing and Scientific Discovery Agents and Multiagent Systems and Natural Language and Web Intelligence. The ICMLBDA 2022 aims to bridge the gap between these non-coherent disciplines of knowledge and foster unified development in Next-Generation Computational Models for Machine Intelligence. ICMLBDA 2022 aims to provide a forum for researchers from both academia and industry to share them

latest research contributions, future vision in the field, and potential impact across industries of ML and Big Data Analytics.

Join us, 29-30 March 2022, to explore discovery, progress, and achievements related to various Machine learning Techniques and Big Data Analytics. The Conference is focused on advanced automation computational optimization of Machine Learning in all Engineering-based applications as well as include specific plenary sessions, invited talks, and paper presentations focusing on the applications of ML and BDA in the fields of Computer/ Electronics/ Electrical/ Mechanical / Chemical / Textile Engineering / Healthcare and Agriculture, Business, and social media and Other relevant domains. The ICMLBDA 2022 will provide its attendees with an uncommon opportunity to expand their network beyond their immediate professional environment. It is a unique chance to work with other accomplished individuals from diverse areas towards the common goal of shaping the future of Communication, Computing, and Society.

Depending on the focus of the particular indexing services, **they may decide to include or not**. If included one can expect it in 15-18 Months. DBLP and Google Scholar are Fast.

Important Dates/ Deadlines

Call for Papers: **November 01, 2021**

Submission: **January 10, 2022**

Notification of **Acceptance**: February 25, 2022

Early Bird Registration: **March 01, 2022**

Oral Presentation of Selected Works: **March 12-13, 2022**

Submissions of Full Papers: **April 10, 2022**



Conference Tracks

Machine Learning

- Foundations
- Applications of deep learning in various engineering streams
- Neural information processing systems and architectures
- Training schemes, GPU computation, and paradigms
- Reinforcement Learning
- Natural Language Processing
- GANs and other neural generative methods
- Representation embedding spaces
- Deep Belief Networks and Statistical Learning
- Advance Optimization techniques
- Autonomous Computing
- Extreme Learning Machines
- Hybrid Intelligent Systems

Big Data Analytics

- Big Data Analytics Adoption and
- Benefits of Big Data Analytics

- Volume Growth of Analytic Big Data
- Managing Analytic Big Data
- Big data storage architecture and GEOSS clearing house
- Data Science Models and Approaches
- Big Data Acquisition, Integration, Cleaning, and Best Practices and Big Data and High-Performance Computing
- Scalable Computing Models, Theories, and Algorithms
- Performance Evaluation Reports for Big Data Systems
- Many-Core Computing and Accelerators
- Analytics Reasoning and Sense-making on Big Data

Submission Guidelines: Papers reporting original* and unpublished research results about the related topics are solicited. ***(papers with plagiarism of more than 30% will be outrightly rejected)**

Full paper manuscripts must be in English of up to 10 pages as per format. For authors convenience, Springer has summarized in the Author Guidelines document how a proceedings paper should be structured, how elements (headings, figures, references) should be formatted using our predefined styles, etc. The PDF of the Authors Guidelines can be downloaded from the given link or as part of the zip files containing the complete sets of instructions and templates for the different text preparation systems. Springer has developed LaTeX style files and Word templates to help prepare a paper. LaTeX is the preferred format for texts containing several formulae, but Word templates are also available on the following link:

<https://www.springer.com/gp/authors-editors/conference-proceedings/conference-proceedings-guidelines>

Submissions should **NOT** include the author(s), affiliation(s), e-mail address(es), and postal address(es) in the manuscripts. Papers will be selected based on their originality, timeliness, significance, relevance, and clarity of presentation. Paper submission implies the intent of at least one of the authors to register and present the paper if accepted.

The ONLINE submission site: **Springer OCS**

<https://ocs.springer.com/misc/home/ICMLBDA2021>

Presentation through Virtual Platform

Amid prevailing conditions due to COVID-19, a virtual meeting platform may be made available for all registered authors who intend to submit their work but are unable to attend the conference. Authors may register and present their papers through the virtual platform. Authors shall be sent a Certificate of Participation, Conference Proceedings link, and relevant literature by mail.

Acceptance & Publication: After a double-blind peer review, qualifying Regular Papers may be accepted as either Full Papers or Short Papers. The papers must be part of the worldwide scholarly discourse in the field covered by the library. The reviews will be done to make sure papers are relevant for the chosen classifications to ensure subscribers receive relevant content. **NO extra fee** is charged from authors for inclusion in proceedings. Authors will grant a non-exclusive, revocable license that allows providing services to users.

Special Sessions

ICMLBDA-2022 invites eminent academicians, scientists, researchers, industrialists, technocrats, government representatives, social visionaries, and experts from all strata of society to work together for more meaningful and professional outcomes. The ICMLBDA 2022 team plans to hold workshops/special sessions on various areas of expertise, in any of the tracks based on related themes. The Workshops/Special Sessions will be chaired by experts from different fields. The presentation of the papers will be scheduled on any day (March 12-13, 2022) of the conference.

Session - 1

Artificial Intelligence and Machine Learning

Chair:



Dr. Priyanka Mishra

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Bosubabu Sambana

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Dr. Ghanapriya Singh

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Aim & Objectives

This session Will highlight the recent progress in fundamental research in Engineering, Science, and Technologies for various Applications, integrate various aspects from Advanced Scientific Technologies, provide a correlation of multidisciplinary areas and become a point of great interest. Moreover, it will provide cutting-edge research from around the globe on this field. Current status, trends, future directions, opportunities, etc. will be discussed, making it friendly for beginners and young researchers, and academicians.

- ✚ Artificial Intelligence and Automation
- ✚ Artificial Intelligence with Neuroscience
- ✚ Data Science and Big Data
- ✚ Blockchain and Security
- ✚ Cryptography and Quantum Computing
- ✚ Data Communication and Networks, 5G, 6G, Social Networks

- ✦ Internet of Things and Its Applications, IIoT 4.0 and Embedded System
- ✦ Computational Biology and Bio-Medical Informatics
- ✦ Images, Signal Processing and Multimedia
- ✦ Cognitive Science and Algorithm Design
- ✦ Augmented Reality and Virtual Reality
- ✦ Cloud Computing and Soft. Fog, Edge, Grid Computing
- ✦ Internet and Web Applications
- ✦ e-Commerce, e-Governance, Game Theory and Applications
- ✦ Experimental Simulations and Modeling Techniques
- ✦ Intelligent System Architecture and advanced Holographic Projections
- ✦ High-Performance Computing
- ✦ Quantum Computing
- ✦ Machine Learning
- ✦ Human-Computer Interaction
- ✦ Search and Information Retrieval
- ✦ Human Language Technologies

Session - 2

Internet of Things, Networks and Security

Chairs:



Dr. Yegireddi Ramesh

Professor and HOD, Department of Information Technology, Aditya Institute of Technology and Management, Tekkali, JNTU Kakinada, Andhra Pradesh, India
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Dr. K. Narasimharaju

Professor and HOD, Department of CS & IT, Lendi Institute of Engineering and Technology, Vizianagaram JNTU Kakinada, Andhra Pradesh, India
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This conference will provide an excellent international forum for sharing knowledge and results in the theory and applications of Computer Networks, the Internet of Things, and Security. Original papers are invited on Networks, the Internet of Things, and security. The conference aims to provide a platform for researchers and practitioners from both academia as well as industry to meet and share cutting-edge development in the field. Topics of interest include, but are not limited to, the following:

Computer Networks

- ✦ Next Generation Internet and Web Architectures
- ✦ Mobile Networks & Wireless LAN
- ✦ New Network Architectures and
- ✦ Network-Based Emerging Applications
- ✦ Network Protocols and Wireless Networks

- ✦ Big Data /Cloud computing and networks
- ✦ QoS and Resource Management in Networks
- ✦ Routing, Switching, and Addressing Techniques
- ✦ 5G/6G cellular systems and heterogeneous networks
- ✦ Artificial intelligence (AI) and autonomous networking
- ✦ Wireless Multimedia Systems

Internet of Things

- ✦ 5G Networks and IoT
- ✦ IoT and Personal Data Protection
- ✦ IoT Interoperability and Multi-Platform Integration
- ✦ Sensor and Actuator Networks, Wearables, Body Sensor Networks, Smart Portable Devices
- ✦ Web of Things and Web of Everything
- ✦ Routing and Control Protocols
- ✦ Industrial IoT and Factory of Things and Internet of Things
- ✦ Smart Home, Smart Cities, Smart Public Places
- ✦ Smart Vehicle Automation
- ✦ Smart Agriculture and Water Management
- ✦ Smart factories and Industry 4.0
- ✦ e-Health, Assisted Living and e-Wellness
- ✦ Mobile Cloud Computing (MCC) and IoT

Security

- ✦ Emerging techniques and algorithms in Cryptography
- ✦ Digital Signature Techniques
- ✦ Big Data Techniques in Cyber Security
- ✦ Forensic Analysis of Cyber Crimes
- ✦ Secure Design, Tooling, and Engineering
- ✦ Advance Security techniques
- ✦ Security & Privacy for Emerging Technologies: VoIP, Social Networks and Cyber-physical systems
- ✦ Gaming Application Security, Cyber Security, and AI
- ✦ Malicious cryptography
- ✦ Security-as-a-service and IIoT security and privacy

Session - 3

AI and Data Science applications in the fields of Mechanical Engineering

Chairs:

Dr. G. Raghavendra

Assistant Professor,
Department of Mechanical Engineering,
National Institute of Technology, Warangal, Telangana, India

Dr. D. Harsha Vardhan

Associate Professor and R&D Head of the Intuitions,
Department of Mechanical Engineering,
PVKK Institute of Technology, JNTU Anantapur, Andhra Pradesh, India

Dr. K. Ramesh Rao

Department of Computer Science and Engineering,
PVKK Institute of Technology, JNTU Anantapur, Andhra Pradesh, India

Objectives

This conference provides an opportunity in the interdisciplinary area of machine learning, Artificial intelligence applications in the fields of mechanical engineering. The conference aims to bridge the gap between Machine learning, Artificial Intelligence, and core Engineering with an insight into scientific research and practical implementation of this method in the fields of

- ✦ Optimization
- ✦ Machining
- ✦ Product Design
- ✦ Process Planning
- ✦ Data Analysis
- ✦ Finite Element Analysis
- ✦ CFD
- ✦ Renewable Power Generation
- ✦ IC Engines
- ✦ Alternate Fuel
- ✦ Fore Casting
- ✦ Any other related interdisciplinary area

Session - 4

Big Data in Biology

Chairs:



Dr. Yasha Hasija

Department of Biotechnology,
Delhi Technical University, India
<https://dtu.irins.org/profile/67082>

Aim & Objectives

The field of big data in biology has seen a significant increase in popularity since the late-1990's. With emerging high-throughput technologies, biological sciences have been exploded with an enormous amount of data. The data science methods provide various tools for handling and analyzing these big biological data. Preliminary data analysis constitutes storing visualization and statistical analysis for getting new insights from the data. Identification of reliable features from data using machine learning algorithms helps in the development of predictive tools. The goal of the session on "Big Data in Biology" is to provide researchers, students, and educators with a key interdisciplinary forum to present and discuss the latest developments, innovations, and concerns, as well as practical problems and opportunities.