

# TECNIA INSTITUTE OF ADVANCED STUDIES

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### NCAAIRSB - 2018





12th October, 2018, Tecnia Auditorium, TIAS, New Delhi

Date and Day 12<sup>th</sup> October 2018, Friday

Venue

Tecnia Auditorium,

Madhuban Chowk, Rohini, Delhi-110085

### Report

Event : National Conference

Topic : Advancements in Artificial Intelligence: Robotic Solutions for

**Business** 

Date : 12<sup>th</sup> October, 2018

Day : Friday

Venue : Tecnia Auditorium Timing : 09:00 am onwards

Beneficiary : 120

Convener : Dr. Vishal Khatri, HOD-MCA

Chief Guest : Prof. (Dr.) Amit Prakash Singh, USICT, GGSIP University

Guest of Honour : 1. Prof.(Dr.) Harleen Kaur, Jamia Hamdard University, New Delhi

2. Dr. Anup Girdhar, CEO, Sedulity Solutions & Technologies,

Delhi.

3. Mr. Ishan Vajpayee, Manager(ERP & IT), Indraprastha Gas Ltd.,

New Delhi

### **About the Conference:**

Artificial Intelligence is able to perceive patterns in data that humans cannot. AI-guided transport is no longer being confined to the pages of sci-fi literature. Self- driving cars have already populated the market; however, a driver is required at the wheels for safety purposes. With Google, Uber and General Motors trying to establish themselves at the top in this market, it will not be long before driverless vehicles become a reality. Machine Learning will be crucial in ensuring that these Automated Vehicles operate smoothly and efficiently. Robotic Process Automation is the application of machine learning to automate rule-based tasks. It will help people to focus on the critical aspects of their job while leaving the routine aspects to machines. Automation can range from data entry to complete process automation. The reach of AI is also expected to blanket jobs that are risky or healthhazardous like bomb diffusion and welding. The application of AI in sales and marketing seems a definite, considering the fact that marketing professionals leave no stone unturned to benefit their business. AI can increase the efficiency of sales and marketing organization. The focus will be on improving conversion rates and sales. Personalized advertising, knowledge of customers and their behavior gleamed through facial recognition can generate more revenue. AI in Robotics is a form of automation that is helping

twenty-first century manufacturers in numerous industries gain rapid increases in productivity. Functions formerly performed by humans especially difficult, dangerous, monotonous, or tedious tasks are now often assumed by robots or other mechanical devices that can be operated by humans or computers.

Moreover, robots can be used to take the place of humans in extreme settings or life-threatening situations involving nuclear contaminants, corrosive chemicals, or poisonous fumes. Firmly established as a critical manufacturing technology, robotics is gaining increasing acceptance by the workforce, garnering praise for its reliability, and being utilized more extensively in medium and small companies.

This 33rd National Conference on Advancements in Artificial Intelligence: Robotic Solutions for Business (NCAAIRSB-2018) offers a platform to discuss opportunity and challenges in the area of artificial intelligence and robotics related to the emerging trends, research technologies & business solutions therof. The conference is seen as a forum to bring together researchers, practitioners from academia, industry & government, to share their knowledge and their work to enrich the students, faculty members & other participants.

### Objectives of the conference

- To develop a clear understanding on the growing use of Artificial Intelligence in the business landscape.
- To increase the expertise and provide the best possible platform by educating students and attracting new researchers to provide skills to research in the area of Robotics solutions for business in Artificial intelligence.
- To understand how Artificial Intelligence can autonomously aggregate and crunch data to provide cohesion across sales and marketing.
- To understand the role of Artificial Intelligence in banking and finance for the immediate solutions in business. growing use of Artificial Intelligence in the business landscape

# Themes/Key Issues

Researchers, Academicians, Industrialists and Students delegates are invited to submit their original papers. Topics covered by the conference include, but are not restricted to, the following: Intelligent Mechatronics and Robotics

- Automation
- Haptics
- Tele-Robotics
- Medical Robotics
- Aerial and Underwater Robotics
- Design and Simulation of Robotic Systems
- Machine learning for Robotics
- Prosthetics and Exo-skeleton Systems
- Micro and Nano-robotics
- Machine Vision for Robotics
- Artificial Intelligence, Neuro control and Fuzzy control for Robotics
- Genetic Algorithms and Reinforcement Learning
- Natural Language Processing
- Users Web footprints
- Human Machine Interface Rapid Proto-typing and 3D Printing Technology
- Robot Localization and Mapping
- Imaging and Image Processing
- Artificial Intelligence for Business
- Computer Vision and Pattern Recognition
- Human Computer Interaction and Visualization
- New Approaches in Automation and Robotics
- Humanoid Robots: New Developments
- AI in Pharma and Bio-medicine
- Applications of AI in Banking, Finance and Risk Management
- Robot Localization and Map Building
- Remote and Telerobotics

- Robotics and Screw Theory
- Micro Electro Mechanical Systems (MEMS) and Micro robots

## **Inaugural Session**



Arrival and Welcome of Chief Guest and Guest of honour at the Venue

The formal inaugural of the conference commenced with the lamp lighting ceremony and Saraswati Vandana followed by felicitation of dignitaries present on the occasion.



Lamp lighting ceremony and SaraswatiVandana



Dr. Ajay Kumar, Director TIAS felicitating Chief Guest Prof.(Dr.) Amit Prakash Singh, USICT, GGSIP University

Dr. Ajay Kumar, Director TIAS felicitating Key Note Speaker Prof.(Dr.) Harleen Kaur, Jamia Hamdard University, New Delhi



Dr. A.K. Srivastava CE (A&D), TIAS felicitating Guest of Honour Mr. Ishan Vajpayee, Manager(ERP & IT), Indraprastha Gas Ltd., New Delhi

Dr. Vishal Khatri, Conference Convener felicitating Guest of Honour Dr. Anup Girdhar, CEO, Sedulity Solutions & Technologies, Delhi



Dr. Jitender Rai, Faculty MCA felicitating Dr. Ajay Kumar, Director TIAS

Dr. Vandana Raghav, Faculty BBA felicitating Dr. A.K. Srivastava, CE(A&D),TIAS



Mr. Mayank Arora, Faculty BA (JMC)felicitating Dr. Nidhi Gupta, Academic Co-ordinator, TIAS

Dr. Neetu Aggarwal Faculty BBA felicitating Dr. Vishal Khatri, Conference Convener

The conference was set off with the opening remarks of Dr. Ajay Kumar Rathore, Director, TIAS. He focused on various opportunities in Artificial Intelligence. He discussed on the benefits of specialization in machine learning and neural network. He also explained the conference's importance in present world.



Dr. Ajay Kumar Rathore, Director, TIAS, giving Opening Remark

The release of 33<sup>rd</sup> National conference proceeding on Advancements in Artificial Intelligence: Robotic Solutions for Business by all the dignitaries on the dias



Dignitaries releasing the Proceedings of the Conference

The keynote address was delivered by Prof.(Dr.) Harleen Kaur, Jamia Hamdard University, New Delhi. Her speech focused on future scope and also implications of AI. She also focused on how artificial intelligence is affecting our decisions and our lifestyles every day and how AI will continue to transform our daily lives in the near future.



Prof (Dr.) Harleen Kaur, Jamia Hamdard University, New Delhi delivering the key note address

Guest of honour, Mr. Ishan Vajpayee, Manager(ERP & IT), Indraprastha Gas Ltd., New Delhi explained the audience about artificial intelligence in cyber security and about the devices used to protect data and hack data. He also discussed about the role of AI in hacking including browsing patterns, recognition systems like face recognition etc.



Mr. Ishan Vajpayee, Manager(ERP & IT), Indraprastha Gas Ltd addressing to the intellectual galaxy

Guest of honour, Dr. Anup Girdhar, CEO, Sedulity Solutions & Technologies, Delhi, narrated his point of view by citing many examples of many fields where artificial intelligence can be used and AI remains one of the most divisive topics in the world of technology. He also discussed about how artificial intelligence techniques are increasingly extending and enriching decision support through coordinating data delivery and analyzing data trends.



Dr. Anup Girdhar, CEO, Sedulity Solutions & Technologies addressing the audience

In his speech, the day's chief guest, Prof.(Dr.) Amit Prakash Singh, USICT, GGSIP University, spoke about advancements in Artificial Intelligence. He elaborated various AI techniques that already become a deep part of our lives as it translates our voices into meaningful instructions for computers and can even help sort our problems He also described the big challenge of now is creating a generalized AI rather than something narrowly focused.



Chief Guest, Prof.(Dr.) Amit Prakash Singh, USICT, GGSIP University addressing the gathering

The inaugural session was concluded with the vote of thanks by Dr. Vishal Khatri, HOD-M



Dr. Vishal Khatri, HOD-MCA and Conference Convener, delivering the vote of thanks

### **Plenary Session I:**

The first plenary session was chaired by Prof.(Dr.) Safdar Tanveer, Jamia Hamdard University



Prof.(Dr.) Safdar Tanveer, Jamia Hamdard University with Paper presenter during Session-I

The first speaker, Dr. Priyanka Goyal, School of ICT, Gautam Buddha University, on her topic" Design of low power high speed optical interconnect architecture" explained how to use robotics.

Ms. Neetu Mutreja, PIET, Haryana, on her topic "Conceptual Insights of Smart Glasses" explained about one of the categories of wearable computing devices..

Next speaker Dr. Smita & Ms. Sakshi, Rukmini Devi Institute of Advanced Studies on the topic "Perceived Risks and Trustworthiness in Online Shopping" talked about how two major types of perceived risks i.e environmental and behavioural makes an impact on consumer

The next speaker Ms. Aashna, Research Scholar, GGSIP University explained her research on the topic "Google Duplex: An AI System" technique" by showing WaveNet model and text to speech (TTS) engine

The next speaker Mr. Ajay Maji & Mr. Rahul, Research Scholar, GGSIP University on the topic "Drone: A modern Age Logistics Delivery Solution" discussed the potential value of modular design to a drone delivery system.

### **Plenary Session II:**

The second plenary session was chaired by Dr. Praveen Kumar Gupta, JIMS, Rohini, GGSIP University

The first speaker, Mr. Nitin, Corporate Delegate, KBCH, Oracle Company discussed on the topic "cyber security"

The next speaker Mr. Vishal Rajbhar, Corporate Delegate, Efficient India Pvt. Ltd. discussed on the topic "Big Data"

The next speaker Dr. Gaurav Aggarwal & Ms. Twinkle Sharma, Jagannath University, NCR on the topic "Various issues & Challenges in various Cloud storage Models & its Comparative Analysis" explained the several cloud computing system providers.

The next speaker Mr. Abhishek, Ms. Simran & Ms. Monalisha, Research Scholar, GGSIP University explained their research on the topic "Human Facial Recognition" by showing various recognition techniques

The next speaker Ms. Lakshika & Ms. Deepawali, Research Scholar, GGSIP University on the topic "Basic of Artificial Neutral Network" explained the application area and limitation of ANN.

#### **Plenary Session III:**

The third plenary session was chaired by Dr. Jitender Rai, Asso. Prof. MCA Tecnia Institute of Advanced Studies



Dr. Jitender Rai, Asso. Prof -MCA, Greeting the External Candidate during Paper Presentation

The first speaker, Mr. Siddharth & Mr. Adarsh, Research Scholar, GGSIP University on the topic "Google's Auto Pilot Car" discussed why and how Google's technology comes and also about Google's vehicle

The next speaker Ms. Anjali Gupta, Research Scholar, GGSIP University on the topic "Computer Vision in Artificial Intelligence" discussed various application of computer visioning in different areas.

Next speaker Ms. Kavita, Research Scholar, GGSIP University on the topic "AI Applications: An overview on Expert Systems" explain the current use of AI technologies in the PSS( Power system stabilizers) design.

The next speaker Mr. Bhupinder & Mr. Vivek, Research Scholar, GGSIP University discussed on the topic "Artificial Intelligence in Business" about the application areas and current use of AI. The last speaker Mr. Prateek & Pulkit Research Scholar, GGSIP University on the topic "Waymo (Autonomous Car)" explained the working and applications of self-driving car project Waymo.

The Conference was concluded by the prize distribution ceremony and valedictory Speech by Ms. Rashmi Ishrawat, faculty- MCA, she thanked the Invited dignitaries, Distinguished Guests, Director TIAS, academic cell, IQAC, Research & publication cell and the staff of TIAS. She highlighted the various discussions and inputs given by research scholars.



Dr. Ajay Kumar, Director TIAS presenting a bouque to student during Prize distribution

Dr. Ajay Kumar, Director TIAS with faculty members and students after valedictory

#### **Learning Outcome:**

- 1. Participants learned the growing use of Artificial Intelligence in the business landscape.
- 2. They learned artificial intelligence techniques are useful in decision support through coordinating data delivery and analyzing data trends.
- 3. The participants also learned the use of artificial intelligence in cyber security and about the devices used to protect data and hack data.
- 4. They understood the applications of Artificial Intelligence in Medical, Banking, Finance and Risk Management.