A Report

of

State Level TALKATHON

on

Recent Trends & Technology

Organized by

Department of Computer Science and Application
Atal Bihari Vajpayee University Bilaspur (C.G.)

in Association with

The Indian Science Congress Association
BILASPUR CHAPTER

**Date
06 JANUARY 2024**

Patron

Prof. A.D.N. Bajpai
Hon'ble Vice Chancellor
Atal Bihari Vajpayee University Bilaspur (C.G.)

Convenor

Dr. H.S. Hota
Prof. & Head, Dept. of CSA
Atal Bihari Vajpayee University Bilaspur (C.G.)

Coordinator

Mr. Jeetendra Kumar
Assistant Professor

Organising Secretary

Dr. Rashmi Gupta
Assistant Professor

Topics for Talkathon

1. Artificial Intelligence [AI]
2. Machine Learning [ML]
3. Internet of Things [IoT]
4. Robotics

About the program

The event begins with an expert lecture on recent trends and technology to raise awareness among participants. Subsequently, a State-level Talkthon focusing on Artificial Intelligence, Machine Learning, Internet of Things, and Robotics will be held, providing a platform for school and college-level students to showcase their developed models. This event aims to unite students, fostering a unique environment for talent display and intellectual competition. Scheduled for January 6, 2024, the Talkthon encourages participants to demonstrate creativity, innovation, and problem-solving skills in various AI, ML, IoT, and Robotics applications. The models will be evaluated by a three-member expert committee, with prizes and certificates awarded to outstanding participants. This initiative seeks to inspire the next generation of tech leaders and recognize their contributions in these cutting-edge fields.

About The Indian Science Congress Association

The Indian Science Congress Association (ISCA) was founded by British chemists, Professors J. L. Simonsen and P.S. MacMahon, who aimed to stimulate scientific research in India. The organization's objectives include advancing science, organizing an annual congress, publishing scientific materials, managing funds, and conducting activities conducive to these goals. The first congress took place in 1914 in Calcutta, with 105 scientists presenting 35 papers in six sections. Over time, ISCA has grown significantly, boasting over sixty thousand members and covering diverse scientific disciplines. From the initial sixteen sections, two committees, and six forums, it has evolved to encompass fourteen sections and one committee, covering a wide range of scientific fields.

About The Department

The Department of Computer Science was established in the year 2013 with the vision to become a center of excellence in computer education and research. Currently, the department offers undergraduate (UG) and postgraduate (PG) programs. Two programs are approved by AICTE, ensuring high-quality education and adherence to industry standards. The department boasts state-of-the-art infrastructure, including four programming labs equipped with the latest I7 computers and interactive panels.

The department organizes various workshops, seminars, and expert lecture series on a regular basis. In line with its commitment to staying at the forefront of technological advancements, the department has established a Centre of Excellence for Artificial Intelligence (AI), Machine Learning (ML), and Internet of Things (IoT).

EVENT DETAILS

The State Level Talkathon on "Recent Trends & Technology," was organized by the Department of Computer Science and Technology at Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur, Chhattisgarh, in association with The Indian Science Congress Association (Bilaspur Chapter) on 6 Januray 2024.The main objective of the event was to provide and exposure and opportunity to the school and college-level students to demonstrate their developed model based on these technologies.

51 teams participated in this events. They exchange their ideas about their model developed using Artificial Intelligence, Machine Learning, Internet of Things, and Robotics etc. with each other. Event aimed empowering tomorrow's innovators. Event were chaired by Prof. A.D.N. Bajpai, Hon'ble Vice Chancellor, Atal Bihari Vajpayee University Bilaspur (C.G.), Convenor Dr. H.S. Hota, gave the welcome address. The event was organized in two phases. The first phase comprises the expert talk and competition organized in the second phase.

The event commenced with a series of enlightening expert lectures by distinguished speakers, setting the stage for the day's activities. Dr. Daniel Okunbor, from Fayetteville State University, USA, and Dr. Biswajit Sarkar, Yonsei University, South Korea, shared their valuable insights in the field of recent trends and technologies. Their talks not only educated the participants but also ignited a sense of enthusiasm and curiosity among them.

A major highlight of the event was the competition in which 51 teams from various colleges participated in the event, consisting total of 90 participants who showcased their innovative models, competing for three prizes with substantial cash awards. The prize distribution was as follows: for 1st Prize: Rs. 5000, 2nd Prize: Rs. 3000 and 3rd Prize: Rs. 2000.

EVENT DETAILS

These models were evaluated by a three-member expert committee: Dr. Amit Chandanan, Associate Professor, Guru Ghasidas Viswavidyalaya,, Dr. Amit Dewangan, Assistant Professor, Guru Ghasidas Viswavidyalaya, and Dr. Rohit Raja, Associate Professor, Guru Ghasidas Viswavidyalaya and the winner were declared by the expert committee was as follows:

- **1st Prize:** Ujjawal Matoliya and Suryaprakash Patel (MCA-III Semester) - "IoT & Cloud Based Smart Switching Plug Compatible with AI Assistant" - Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur, Chhattisgarh (Prize: Rs. 5000)

- **2nd Prize:** Radha Singh Chauhan and Abhishek Jaiswal (M.Sc-III(CS) Semester) - "IoT based Smart Agriculture Monitoring System" - Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur, Chhattisgarh (Prize: Rs. 3000)

- **3rd Prize:** Devlal Patel and Vasudev Kaushik (M.Sc-I(CS) Semester) - "Home Automation" - Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur, Chhattisgarh (Prize: Rs. 2000).

Events were ended by distributing participation certificates and winning awards in the valedictory session followed by group photographies.

The event not only served as a platform for showcasing technical prowess but also fostered a spirit of healthy competition and collaboration. Participants gained valuable insights from the expert speakers and received constructive feedback from the esteemed panel of judges.

The competition structure encouraged participants to push the boundaries of their knowledge and creativity, contributing to the overall growth of the technological landscape. The generous cash awards served as motivation for the participants to deliver their best, making the event a resounding success.

Glimpses of the event

Glimpses of the event

Project Category

- 🔵 Science
- 🔴 Artificial Intelligence [AI]
- 🟠 Machine Learning [ML]
- 🟢 Internet of Things [IoT]
- 🟣 Robotics
- 🔵 Others
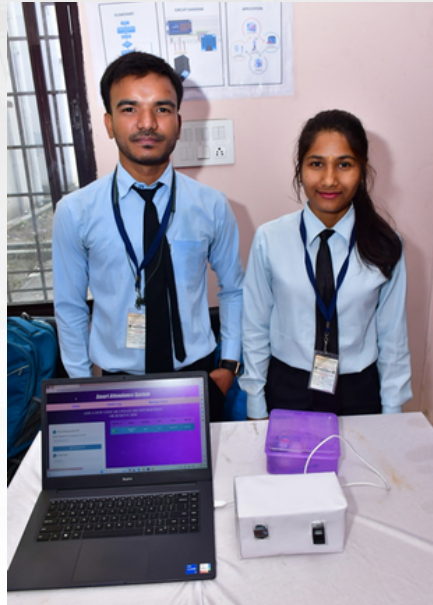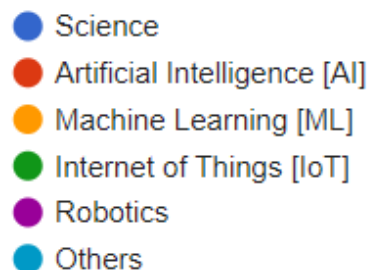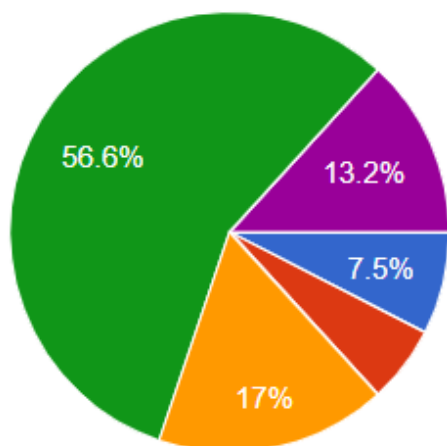
Total Team Participated – 51

S.NO.	Name of Team Leader	First Team Member	Second Team Member	Project Title	School/College/University/Institute
1	Radha Singh Chauhan	Abhishek Jaiswal		IoT based Smart Agriculture Monitoring System	Atal Bihari Vajpayee University, Bilaspur(C.G.)
2	Dipesh dhivar	Himanshu bhardwaj		Arduino based voice control robo car	Atal Bihari Vajpayee University, Bilaspur(C.G.)
3	PALAK JOSHI	Prakash Nirmalkar		IOT BASED	GOVT E. R. Rao PG SCIENCE COLLEGE BILASPUR (C.G.)
4	Tivendra Patel	Somansh Pradhan		Anti Sleeping Alarm For Driver	GOVT E. R. Rao PG SCIENCE COLLEGE BILASPUR (C.G.)
5	Priyanshu Dubey	Aashutosh Pandey	Balmukund Sahu	Alcohol Detector	GOVT E. R. Rao PG SCIENCE COLLEGE BILASPUR (C.G.)
6	Laxmi Agrawal	Riya Rathore	Monish Singh Kashyap	Rain Drop Alarm	GOVT E. R. Rao PG SCIENCE COLLEGE BILASPUR (C.G.)
7	Devlal Patel	Vasudev Kaushik		Home Automation	Atal Bihari Vajpayee University, Bilaspur(C.G.)
8	SHIVA SONI	RAVINDRA NISHAD		IoT And ML Based Three Layer Secured Locker System	Atal Bihari Vajpayee University, Bilaspur(C.G.)
9	Suraj sahu	Manish sahu		Smart car parking system	Atal Bihari Vajpayee University, Bilaspur(C.G.)
10	Pooja sahu			Noise pollution monitoring system	Atal Bihari Vajpayee University, Bilaspur(C.G.)
11	Ayush Gupta	Adarsh Shrivas		IoT Based Smart Blind Steak	D.P. College Bilaspur (C.G.)
12	Govind Kumar	Priyanshu Tiwari	Nikhil Sahu, Chandresh	Gloves for Blind People	D.P. College Bilaspur (C.G.)
13	Himesh Kumar	Suman, Aryan	Raghav, Some	Eye Blink Sensor Goggle	D.P. College Bilaspur (C.G.)
14	Dyalnand patel	Dineshwar		Solar tracking system & smart street light	Atal Bihari Vajpayee University, Bilaspur(C.G.)
15	Vinod kumar patel			IoT-Based Smart Home Automation System	Atal Bihari Vajpayee University, Bilaspur(C.G.)
16	Yash Raj Verma	Kartikey Tiwari	Vidya Shankar	RFID Attendance system	LCIT College of Commerce and Science, Bodri, Bilaspur(C.G.)
17	Aryan Patil	Pranjal Yadav	Ritesh Kumar Nisad	Plant watering smart irrigation System	LCIT College of Commerce and Science, Bodri, Bilaspur(C.G.)
18	Priyanka dubey			Smart traffic management system	Atal Bihari Vajpayee University, Bilaspur(C.G.)
19	Ujjwal Matoliya	Surya prakash patel		IoT & Cloud Based Smart Switching Plug Compatible with AI Assistant	Atal Bihari Vajpayee University, Bilaspur(C.G.)
20	Ravi chandroal	Shraddha verma		Smart parking system	Atal Bihari Vajpayee University, Bilaspur(C.G.)

Participant list

S.NO.	Name of Team Leader	First Team Member	Second Team Member	Project Title	School/College/ University/Institute
21	Parwati Shriwas	Omprakash Yadav		INTERNET OF THINGS (IoT) BASED SMART ATTENDANCE SYSTEM USING FINGERPRINT SENSOR	Atal Bihari Vajpayee University, Bilaspur(C.G.)
22	Rajesh sahu	Deepesh Kumar Singh		IoT based air pollution monitoring system	Atal Bihari Vajpayee University, Bilaspur(C.G.)
23	Rupanjali Bareth	Shashikant Sahu		Arduino Based Robo Car with Path Finding Following and Automatic Obstacle Avoidance	Atal Bihari Vajpayee University, Bilaspur(C.G.)
24	Gulshan pankaj			Machine learning based Face emotion detection using raspberry pi and Pi Cam	Atal Bihari Vajpayee University, Bilaspur(C.G.)
25	Lalima	Seema dhirhe		IoT based garbage monitoring system	Atal Bihari Vajpayee University, Bilaspur(C.G.)
26	Geeta			Smart Attendance System using Raspberry Pi	Atal Bihari Vajpayee University, Bilaspur(C.G.)
27	Chandani Dewangan			IoT Based Secure Surveillance Robot for Agriculture	Atal Bihari Vajpayee University, Bilaspur(C.G.)
28	Sunil Kumar Patel	Lokendra kumar		LPG Gas Leakage Detection using Arduino	Atal Bihari Vajpayee University, Bilaspur(C.G.)
29	Laxmi Kant Soni			IoT Based Patient Health Monitoring System	Atal Bihari Vajpayee University, Bilaspur(C.G.)
30	Yogita	Kalpana		Plant monitoring system	Atal Bihari Vajpayee University, Bilaspur(C.G.)
31	Lipakshee sahu			IoT besed Eyeblink sensor alarm system using Arduino	Atal Bihari Vajpayee University, Bilaspur(C.G.)
32	Aditya Kushwaha	Abhinit Tripathi		IOT Based Home Automation using ESP32	Atal Bihari Vajpayee University, Bilaspur(C.G.)
33	Jankee	Sakshi		Weather monitoring and smart irrigation system	Atal Bihari Vajpayee University, Bilaspur(C.G.)
34	Nisha devi			Automated MCQ GENERATOR FROM TRANSFORMER	Atal Bihari Vajpayee University, Bilaspur(C.G.)
35	Barakha soni			Image captioning	Atal Bihari Vajpayee University, Bilaspur(C.G.)
36	Manisha Gupta			Real-Time Emotion Detection Through Speech	Atal Bihari Vajpayee University, Bilaspur(C.G.)
37	Raveena Rajak			Hybrid model to develop Machine learning based Speech Emotion Recognition System	Atal Bihari Vajpayee University, Bilaspur(C.G.)
38	Anil Kanwar			Next Word Prediction Using GPT-2	Atal Bihari Vajpayee University, Bilaspur(C.G.)
39	Hitesh Dewangan	Priya Koshle		Face Emotion Recognition	Atal Bihari Vajpayee University, Bilaspur(C.G.)
40	Aparna sahu			Hand written digit recognition	Atal Bihari Vajpayee University, Bilaspur(C.G.)
41	Hitesh patel			Development of efficient Tokenizer for Hindi Language	Atal Bihari Vajpayee University, Bilaspur(C.G.)
42	Divyanshu bhardwaj	Shivangi tiwari		Nlp based voice language translation	Atal Bihari Vajpayee University, Bilaspur(C.G.)
43	Gajendra Nishad	Anas Ahmad		Deep Learning Based Face Recognition Attendance System	Atal Bihari Vajpayee University, Bilaspur(C.G.)
44	Abhishek Rushiya	Anjali Namdeo		AI Voice Assistant Power by GPT 3.5	Atal Bihari Vajpayee University, Bilaspur(C.G.)
45	Ayush Naik	Yash Rahi		Iot based Anti Sleep Alarm Model	Atal Bihari Vajpayee University, Bilaspur(C.G.)
46	Akash Nirala	Ravi Kumar Baghel		Gas Leakage Detector with Notification Alert and Sound Alarm	Atal Bihari Vajpayee University, Bilaspur(C.G.)
47	Girja Rathiya	Sonam Ratnakar		IoT based Motor Cycle Security	Atal Bihari Vajpayee University, Bilaspur(C.G.)
48	Ritu Sahu			Automobile Counter using Yolo Model	Atal Bihari Vajpayee University, Bilaspur(C.G.)
49	Kasak Dewangan			News Classification using Machine Learning	Atal Bihari Vajpayee University, Bilaspur(C.G.)
50	Chhaya Verma	Neha		Named Entity Recognition using BERT Model for Hindi Language	Atal Bihari Vajpayee University, Bilaspur(C.G.)
51	Amit Yadav			Sentiment Analysis on Twitter Data	Atal Bihari Vajpayee University, Bilaspur(C.G.)