DATA DIVE

DEPARTMENT OF B.TECH CSE- AI&DS

NEWSLETTER

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DEPARTMENT

VISION

"TO ACHIEVE HIGH. QUALITY IN TECHNICAL EDUCATION THAT PROVIDES THE SKILLS AND ATTITUDE TO ADAPT TO THE GLOBAL NEEDS OF THE DATA SCIENCE AND ANALYTICS SECTOR, THROUGH ACADEMIC AND RESEARCH EXCELLENCE."

MISSION

M1: TO EQUIP THE STUDENTS WITH THE COGNIZANCE FOR PROBLEM SOLVING AND TO IMPROVE THE TEACHING LEARNING PEDAGOGY BY USING INNOVATIVE TECHNIQUES.

M2: TO STRENGTHEN THE KNOWLEDGE BASE OF THE FACULTY AND STUDENTS WITH MOTIVATION TOWARDS POSSESSION OF EFFECTIVE ACADEMIC SKILLS AND RELEVANT RESEARCH EXPERIENCE.

M3: TO PROMOTE THE NECESSARY MORAL AND ETHICAL VALUES AMONG THE ENGINEERS, FOR THE BETTERMENT OF THE SOCIETY.

PROGRAM OBJECTIVES

1

ANALYTICAL SKILLS:

To facilitate the graduates with the ability to visualize, gather information, articulate, analyze, solve complex problems, and make decisions. These are essential to address the challenges of complex and computation intensive problems increasing their productivity.

2

TECHNICAL SKILLS:

To facilitate the graduates with the technical skills that prepare them for immediate employment and pursue certification providing a deeper understanding of the technology in advanced areas of computer science and related fields, thus encouraging to pursue higher education and research based on their interest. inder here.

3

SOFT SKILLS:

To facilitate the graduates with the soft skills that include fulfilling the mission, setting goals, showing self-confidence by communicating effectively, having a positive attitude, get involved in team-work, being a leader, managing their career and their life.

4

PROFESSIONAL ETHICS:

To facilitate the graduates with the knowledge of professional and ethical responsibilities by paying attention to grooming, being conservative with style, following dress codes, safety codes, and adapting to technological advancements.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Fundamentals and critical knowledge of the Computer System and Data Analytics:

Able to Understand the working principles of the computer System and its components , Apply the knowledge to build, asses, and analyze the software and hardware aspects of it .

PSO 2: The comprehensive and Applicative knowledge of Software Development:

Comprehensive skills of Programming Languages, Software process models, methodologies, and able to plan, develop, test, analyze, and manage the software and hardware intensive systems in heterogeneous platforms individually or working in teams.

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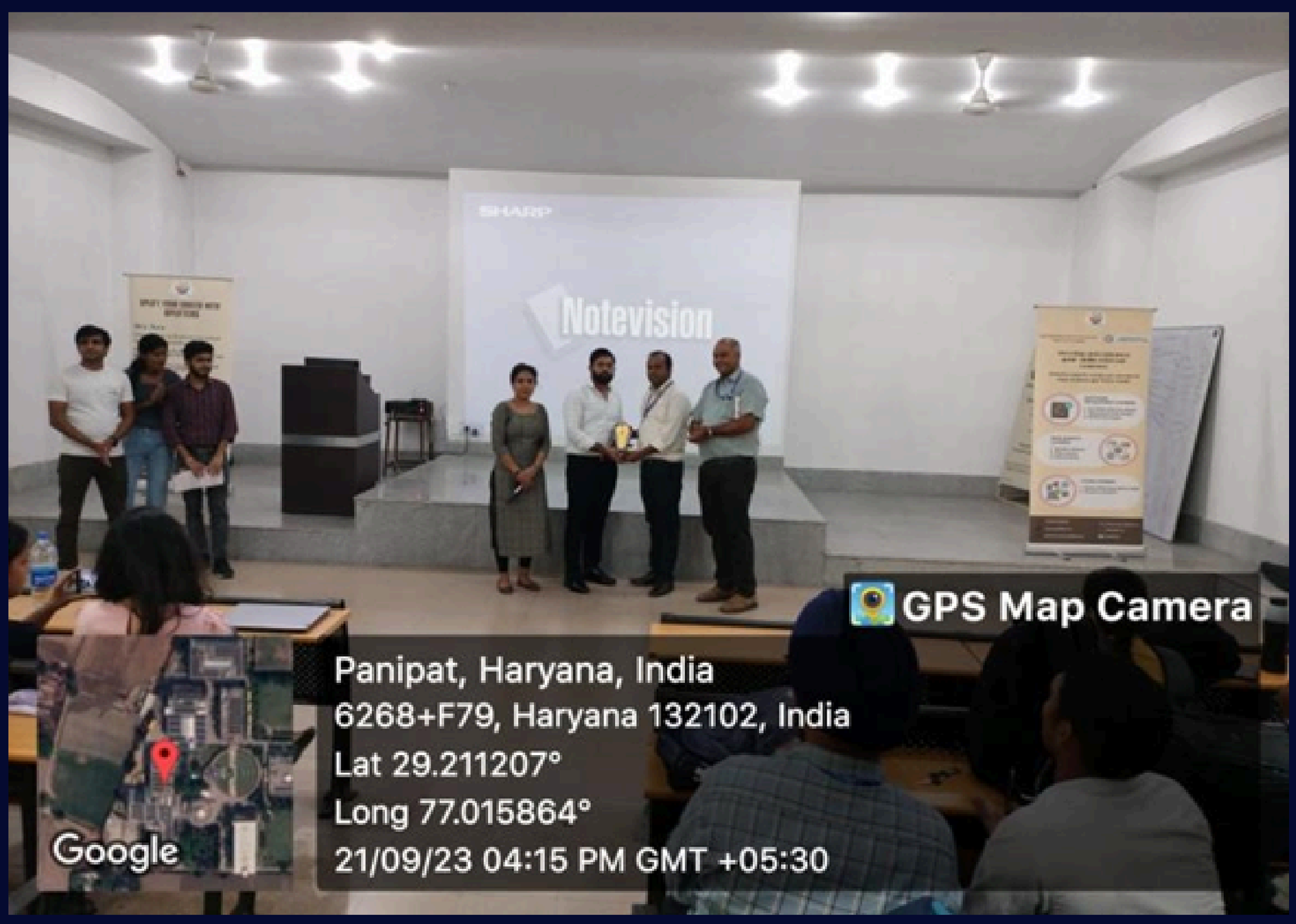
AZURE BUILD BOOTCAMP

The Department of CSE-AI&DS organized a One day Workshop on" AZURE STORAGE SERVICES” and “NATURAL LANGUAGE PROCESSING” on 18th of August 2023 (11 AM Onwards) The Azure Storage Services workshop covers Azure's storage options (Blob, File, Queue, Table Storage), account management, best practices, integration with other Azure services, and hands-on exercises. The Natural Language Processing (NLP) workshop introduces NLP basics, tools (NLTK, spaCy, TensorFlow), text preprocessing (tokenization, stemming, lemmatization), building NLP models (sentiment analysis, machine translation), advanced topics (deep learning, transformers), and hands-on projects.

WORKSHOP ON GITHUB

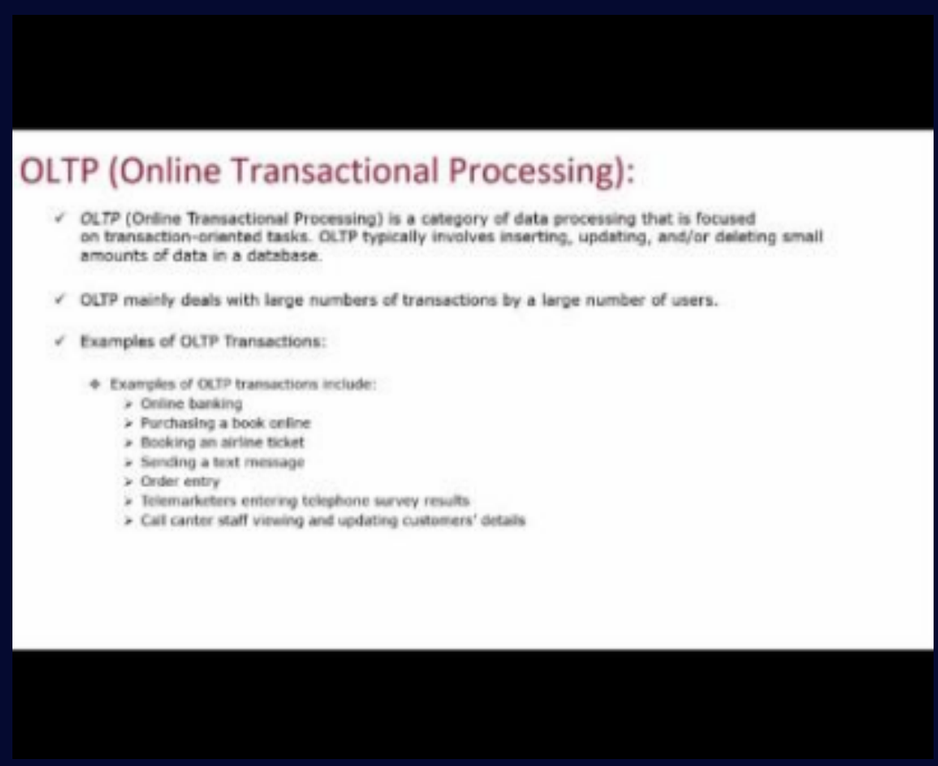


The Department of CSE AIDS organised a workshop on GitHub on 21st of September 2023. GitHub for effective version control in software development projects. It will delve into topics such as the importance of version control, how GitHub works, it's key features like branch management and pull requests, and the advantages it offers in terms of collaboration, code management, and project organization. The objective of this lecture was to provide a comprehensive overview of the GitHub Version Control System, including its key features, benefits, and best practices for effective utilization.

CAREER GUIDANCE SESSION

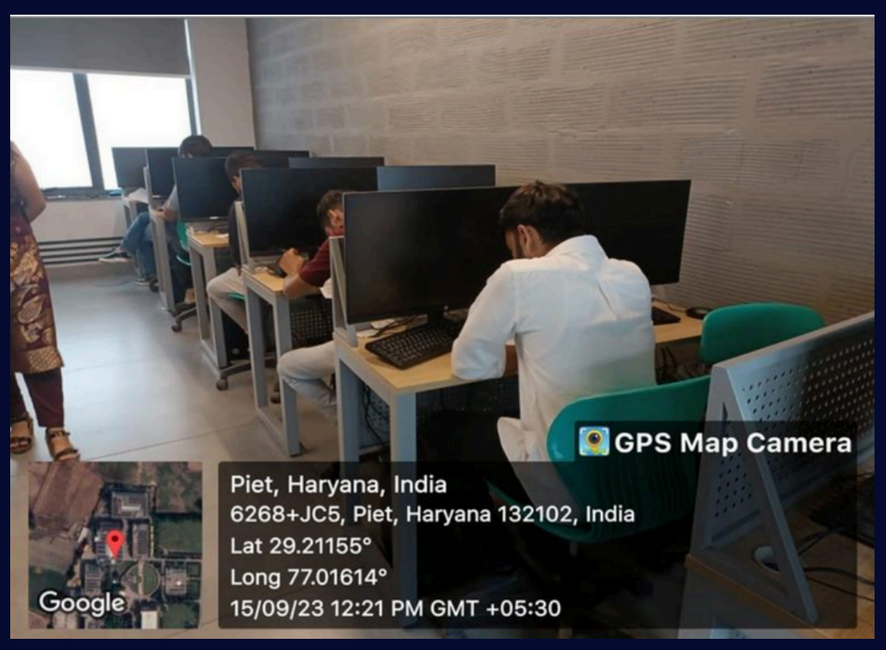
The Department of CSE-AI&DS organised a Career Guidance Session on 1st September 2023. Career guidance session allow a student to make informed decisions.students gauge the health of their fields, alerting them to problems as well as potential improvements that can be made while choosing a career. This session also helped students to organize their thoughts about the dos and the don’ts, keeping them aware of key performance indicators. Awareness of the career options through reports keeps candidates aligned and focused on their goals. Easy understanding of potential options also frees up time and energy to execute on the tasks that will impact the student’s performance.

GUEST LECTURE ON BUSINESS INTELLIGENCE



The Department of CSE organised a guest lecture on "Business Intelligence" by Mr. Dharm Singh on 2nd September 2023. The overall objective of business intelligence was to allow a business to make informed decisions. A company with a working BI strategy will have data that is accurate, complete, and organized. Business intelligence can also help organize teams, keeping them aware of key performance indicators (KPIs). Awareness of KPIs through dashboards and reports keeps teams aligned and focused on their goals. Easy access to metrics and KPIs also frees up time and energy to execute on the tasks that will impact the company's performance.

ENGINEER'S DAY CELEBRATION



Department of CSE-AIDS, in collaboration with ECE and CSE-CS department celebrated National Engineer's Day on September 15, 2023. We kick-started the day with a Coding Competition, Poster Making Competition, and Quiz Competition, providing a platform for our tech-savvy students to showcase their skills and knowledge.

Winners of Coding Competition:

- I — Yogya(CSE) 1st Year
- II — Sarthak(BCA) 1st Year
- III — Akshat (CSE-AIDS) 2nd Year

Winners of Poster Competition:

- I — Manan(CSE-AIDS) 2nd Year
- II — Jigyanshu(CSE-AIDS) 2nd Year

Deep Learning Techniques for Multimedia Applications

The Department of CSE-AI&DS organized an expert lecture on "Deep Learning Techniques for Multimedia Applications" on 25 September 2023. The objective of this session was to explore, develop, and evaluate advanced deep learning techniques for enhancing multimedia applications. The primary aim is to address specific challenges in the field of multimedia processing and contribute to the advancement of state-of-the-art solutions for real-world applications.

The objective of this session was to explore, develop, and evaluate advanced deep learning techniques for enhancing multimedia applications. This includes leveraging deep neural networks to improve image and video analysis, content recommendation, and multimedia content generation. The primary aim is to address specific challenges in the field of multimedia processing and contribute to the advancement of state-of-the-art solutions for real-world applications.

Design Your Future
Guest Lecture

The Department of CSE-AI&DS organized an expert lecture on "Design Your Future" on 28-10-2023. The objective of this lecture is to provide a comprehensive analysis and strategic framework for individuals seeking to proactively shape their future endeavors, both personally and professionally. By exploring key principles, methodologies, and actionable steps, this report aims to empower readers with the knowledge and tools necessary to envision and realize their desired futures, fostering a sense of purpose, direction, and fulfillment. Through a combination of theoretical insights and real-world examples, the report seeks to inspire and guide individuals in designing a future that aligns with their aspirations, values, and aspirations.

Diwali Celebration

The Department of CSE-AI&DS celebrated Diwali on 3rd November 2023. The objective of Diwali Celebration is to elucidate the incorporation of traditional customs, and outline the event's organizational aspects. We also scrutinize the Rangoli competition, focusing on the chosen themes and the creative aspects of the designs. Participation and engagement within the college community will be assessed, and any outcomes or awards from the event will be summarized. It will explore the broader societal impact and community involvement, concluding with an emphasis on the event's significance in promoting culture and sustainability within the college. It encourages collaboration among departments, offers practical learning experiences, and helps preserve cultural heritage.

Faculty Achievement

- The AI-Based Plant Extract Analyzing Device, credited to Dr. B.K. Verma as one of its inventors, was granted a patent on August 4, 2023. This innovative device is designed to identify plant diseases using advanced artificial intelligence.

- Dr. B.K. Verma's expertise extended to the creation of the Wearable Health Monitoring Jacket, an innovative device for tracking health metrics, which was granted a patent on September 19, 2023.

- Dr. B.K. Verma contributed significantly to the development of the Intelligent Healthcare Insurance Data Analytic System for Personalized Coverage Assessment, This innovative system was published a patent on October 13, 2023.

- Dr. Shally Nagpal's expertise was also instrumental in the creation of the Intelligent Healthcare Insurance Data Analytic System for Personalized Coverage Assessment. This innovative system was published on October 13, 2023.

- Ms. Mitu Sehgal played a key role in the creation of the AI Based Plant Extract Analyzing Device to Identify Disease, which was granted a patent on 04-Aug-23.

Faculty Achievement

- Ms. Mitu Sehgal contributed significantly to the development of the Intelligent Healthcare Insurance Data Analytic System for Personalized Coverage Assessment, which was published a patent on August 13, 2023.

- Ms. Anisha Grover, Assistant Professor, was instrumental in the development of the Intelligent Healthcare Insurance Data Analytic System for Personalized Coverage Assessment, which was published a patent on August 13, 2023.

- Ms. Ritu Rani, Assistant Professor, contributed significantly to the development of the same Intelligent Healthcare Insurance Data Analytic System for Personalized Coverage Assessment, which was published a patent on August 13, 2023.

- Mitu Sehgal authored the chapter "Splitter with Cryptographic Model for Cloud Data Transmission Security," published in 2023 by Chapman and Hall/CRC.

- Dr. BK Verma authored the paper titled "An IoT-based Client Health Monitoring System Using Basic Essential Markers," presented at the International Conference on Information Technology, InCITe 2023 in Jaipur, India, published by Springer Conference in 2023.

Faculty Achievement

- Mitu Sehgal authored the paper titled "Intelligent Hybrid Model for Energy-Efficiency on WBAN," presented at the International Conference on Advanced Computing & Communication Technologies (ICACCTech) in 2024. The paper was published in 2023 with a DOI identifier.

- Dr. Shally authored the paper titled "Original Research Article LCNA-LCTM CNN based attention model for recommendation system to improve marketing strategies on e-commerce," published in the Journal of Autonomous Intelligence in 2023.

- Hemlata authored the paper titled "Kidney Stone Detection Using Fast Fuzzy Technique," published in the International Journal of Science and Engineering Development Research in 2023.