



**PANIPAT INSTITUTE OF
ENGINEERING AND TECHNOLOGY**
(Approved by AICTE, New Delhi & Affiliated to Kurukshetra University, Kurukshetra)

*Department of
Computer Applications-PG*

Master of Computer Applications



NEWSLETTER



July - December 2023

Mastering Python: A Transformative Crash Course for Aspiring Tech Professionals

Indispensable programming language. Recognizing its importance, the Department of Computer Applications-PG organized an intensive Python Crash Course from September 2nd to November 25th, 2023. The course was designed to provide participants with a comprehensive foundation in Python programming, equipping them with essential skills for tackling challenges across various domains such as web development, data analysis, artificial intelligence, machine learning, and automation. During the sessions, participants delved into Python's core concepts, exploring its rich ecosystem of libraries and frameworks like NumPy, Pandas, TensorFlow, and Django, which are essential for streamlining development and problem-solving in the modern technological landscape.



The department extends heartfelt thanks to all the participants for their enthusiasm and dedication, and looks forward to offering more such enriching programs in the future.

The course was structured to be both theoretical and practical, ensuring that attendees not only understood the fundamentals of Python but also gained hands-on experience in real-world applications. The instructors, experts in the field, provided guidance and mentorship to help participants hone their coding abilities and develop confidence in using Python for diverse projects.

As the course concluded, participants left with a solid foundation in Python, ready to apply their newfound knowledge to various technological endeavors. The success of this workshop reflects the growing demand for Python skills in the ever-evolving tech industry and underscores the department's commitment to providing high-quality education and skill development opportunities for aspiring professionals.



Vision of the Department

To be recognized as a centre of excellence for academic repute to create competent, ethical, and responsible Computer Applications professionals with the abilities to contribute globally to the industry, environment and the society at large.

Mission of the Department

- M1:** Equip students with knowledge and practical skills in computer applications in line with the needs of the industry.
- M2:** Foster research and innovation capabilities, imbibe ethics and values, and instill leadership in students to support sustainable development.
- M3:** To develop students with an analytical mindset and the competence to solve real-life problems.
- M4:** Facilitate linkages with industry and professional bodies, provide experiential learning opportunities, and develop responsible students with abilities to learn and work independently.

Program Educational Objectives (PEOs)

- PEO1:** Demonstrate analytical abilities, design skills, multidisciplinary competence, critical thinking, and the ability to foster innovations.
- PEO2:** Demonstrate leadership and supportive roles in the dynamic work environment with ethical behavior and responsibility in their professions.
- PEO3:** To excel in careers in the diverse domains of computer applications, higher education, and entrepreneurship.
- PEO4:** Adapt to evolving technologies with the ability to learn independently

TechBuzz 2k23 - A Thrilling Two-Day Event

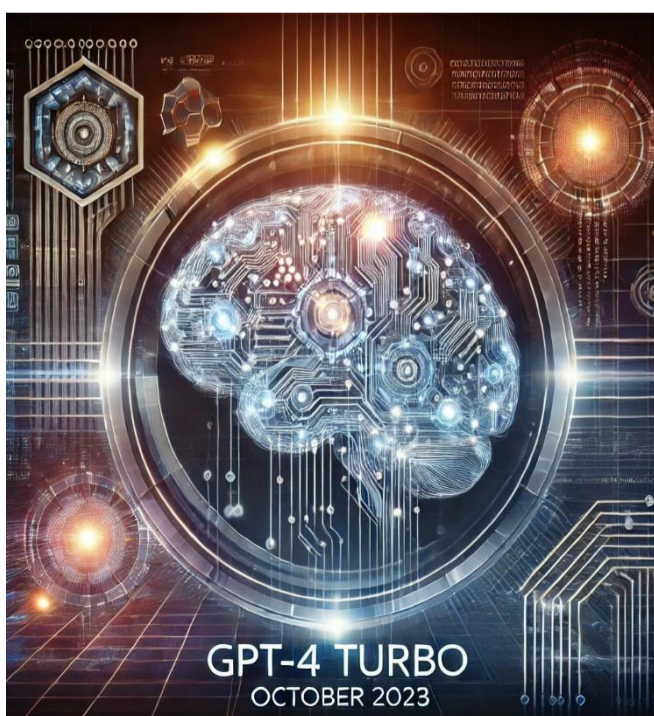
On October 5th and 6th, 2023, the MET Club of Department of Computer Applications-PG organized *TechBuzz-2k23*, a dynamic event aimed at refreshing the club with new members. The event featured three exciting rounds: a maze game testing technical, aptitude, communication, and physical skills; a Code Class where participants solved coding problems; and a Rapid Fire round on general knowledge.

A total of 22 teams participated in the first round, with 11 advancing to the coding challenge. After the final round, 18 deserving students were selected as new members of the MET Club and were honored with certificates and badges.

The event was a great success, fostering healthy competition and camaraderie among students while allowing them to showcase their multifaceted abilities. The MET Club looks forward to the contributions and fresh perspectives these new members will bring to the club in the upcoming year.



Revolutionary AI Breakthrough: OpenAI's GPT-4 Turbo Launch



In October 2023, OpenAI unveiled *GPT-4 Turbo*, a more powerful and efficient version of its groundbreaking language model. With enhanced performance, improved cost-efficiency, and the ability to process larger inputs, GPT-4 Turbo promises to significantly advance applications in AI-driven industries such as automation, content creation, and customer service. This breakthrough marks a major step forward in the development of artificial intelligence, further solidifying GPT models as essential tools for businesses and developers worldwide.



SANKALP: MCA Orientation Program 2023



Department of computer applications – PG hosted its annual **MCA Orientation Program, SANKALP (Determined to Compete)** welcoming the incoming batch of Master of Computer Applications (MCA) students. This seven-day program aimed to ensure a smooth transition for students into their academic and personal journey at the institute.

The program, aligned with AICTE guidelines, featured various activities to familiarize students with the campus, curriculum, and faculty. Interactive icebreaker sessions encouraged peer connections, while faculty-led curriculum overview sessions provided insights into academic expectations. Students explored the campus through guided tours and maps, gaining an understanding of classrooms, labs, libraries, and other facilities.

To keep pace with modern learning trends, digital orientation sessions introduced students to virtual platforms and tools they would use throughout their coursework. These efforts ensured students felt confident and prepared to navigate both physical and digital environments.

Speaking about the program, the Department highlighted its focus on holistic development, stating, "SANKALP is not just about adapting to a new academic routine; it's about inspiring students to set goals and achieve them with determination and resilience."

The orientation program concluded on a high note, leaving students motivated and equipped to embark on their journey at PIET. With SANKALP setting the tone for the academic year, the MCA Department reaffirmed its commitment to nurturing the aspirations of its students.

Teacher's Day Celebration



On September 5th, 2023, the Department of Computer Applications - PG celebrated Teacher's Day, a heartfelt occasion dedicated to honoring the invaluable contributions of teachers who shape the future of students. This special event, organized by the students of BCA and MCA, was an opportunity to express gratitude to the educators who inspire, guide, and empower students to achieve their fullest potential. The celebration began with a traditional lamp lighting ceremony, symbolizing the illumination of knowledge and wisdom. Students and teachers came together to mark the occasion, with various cultural performances including group dances and songs, all thoughtfully themed around Teacher's Day. These performances showcased the students' creativity and deep appreciation for their mentors. The event concluded with inspiring words from Dr. Dinesh Verma, Head of the DCA-PG, who thanked all the teachers for their dedication and hard work. His speech brought a fitting end to the celebrations, leaving everyone present with a sense of gratitude and respect for the educators who continue to make a difference in the lives of their students.

TechSpark

The Department of Computer Applications (PG) at Panipat Institute of Engineering and Technology (PIET), in collaboration with MET and the TechVision Club, hosted **TechSpark 2023**, a vibrant and innovative tech festival, drawing participation from over 200 students across various branches.

The event, held recently on the institute's campus, was a blend of technical challenges, creative contests, and literary activities, all designed to test participants' problem-solving skills, technical expertise, and creative thinking.



Students showcased exceptional talent across these events, which not only challenged their technical acumen but also boosted their confidence in communication and teamwork. Literary events such as the Spell Bee encouraged participants to delve into the beauty of language, while programming challenges like Blind C pushed the boundaries of coding abilities.

World Space Week Celebration Inspires Students at Regional Remote Sensing Centre-North



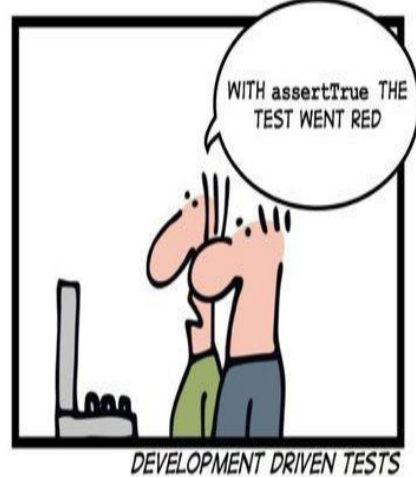
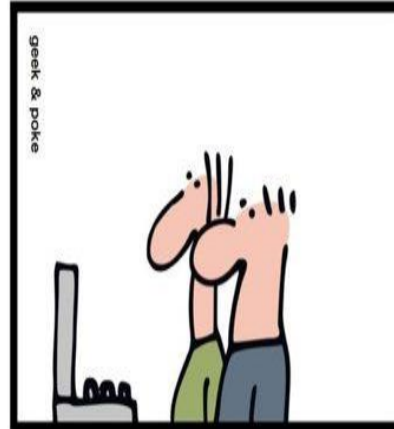
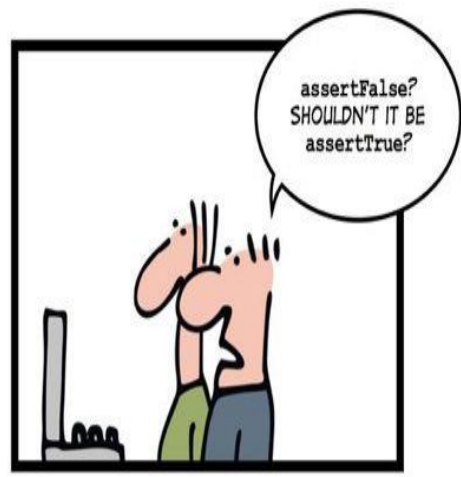
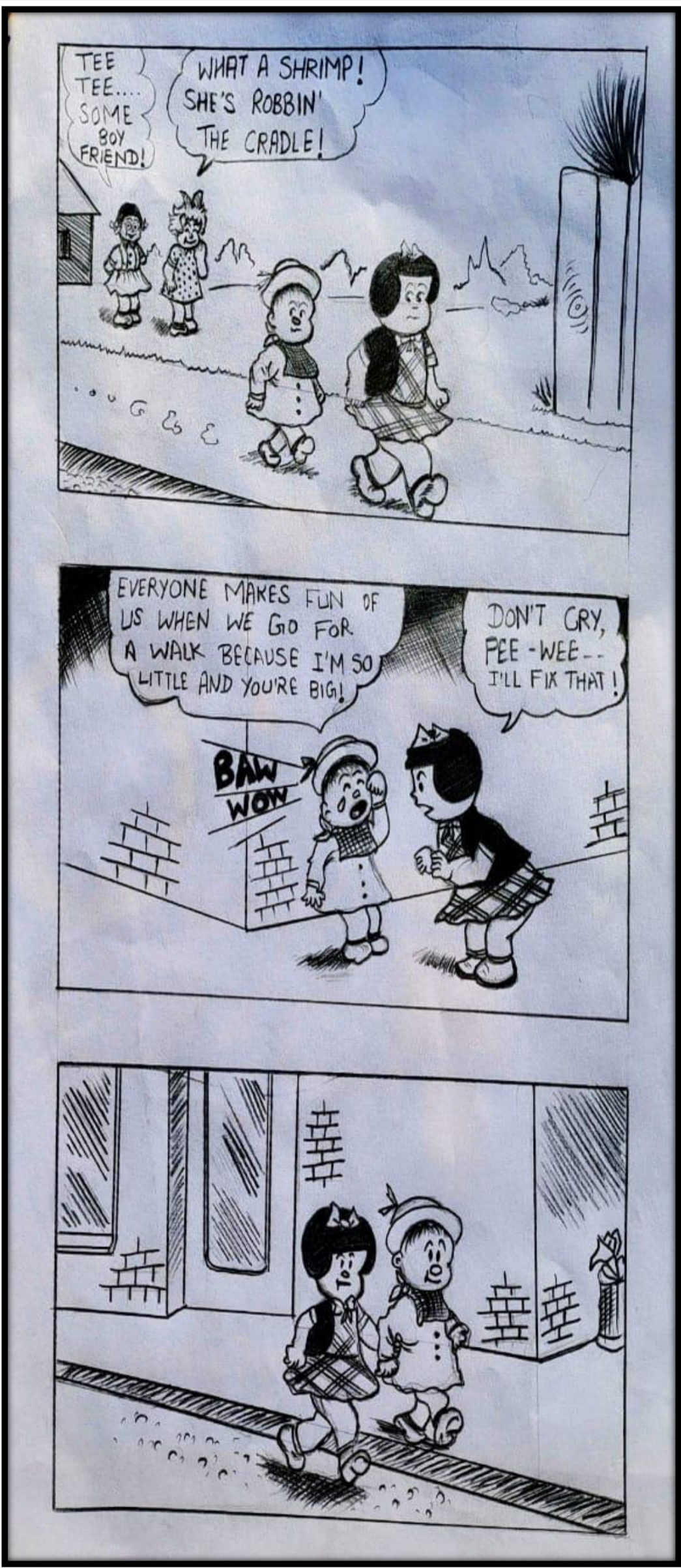
A team of 22 students and two faculty members from the Department of Computer Applications at Panipat Institute of Engineering and Technology participated in the World Space Week celebrations at the Regional Remote Sensing Centre-North. Held from October 4 to 10, the event offered a blend of expert lectures, exhibitions, workshops, and interactive competitions designed to ignite interest in space science and technology.

The program began with a formal inauguration led by Ms. Parabjot Kaur, who emphasized the significance of World Space Week in advancing knowledge and awareness of space exploration. Distinguished speakers, including Dr. Sameer Saran, Deputy General Manager of the Regional Remote Sensing Centre-North, and Mr. A. Arunachalam, Director of ICAR-Central Agroforestry Research Institute, delivered comprehensive lectures. Dr. Saran provided insights into the history of India's space program, ISRO's organizational structure, satellite technology advancements, and the critical role of satellites in disaster management. Meanwhile, Mr. Arunachalam highlighted the synergy between space technology and entrepreneurship, discussing global industry trends, satellite constellations, and the evolving Indian private space sector.

Participants were also treated to exclusive multimedia presentations, including videos of Chandrayaan-3's journey, live launches of LVM-3/M4 and ADITYA-L1, and rover footage, offering an immersive experience of India's space exploration milestones.

The students left inspired and better informed about the dynamic field of space science, eager to contribute to the ever-evolving space exploration frontier.

Big-Hearted Solution: Turning Teasing into Triumph



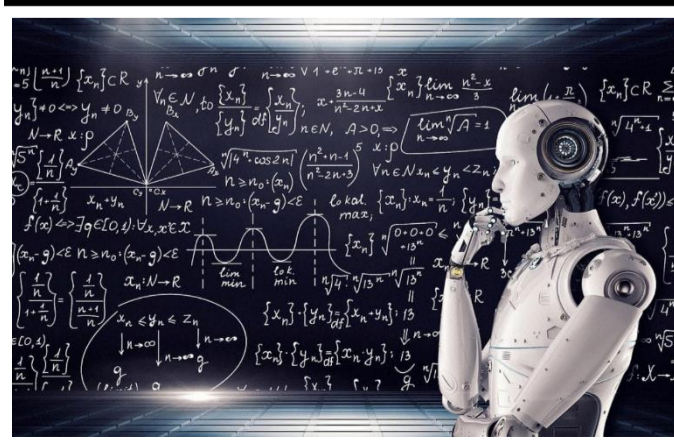
1. If robots wrote this Newsletter , what would the headlines look like?
2. Which technology do you think secretly hates us but is too polite to show it?
3. If your smartphone had a diary, what embarrassing secrets would it reveal?
4. What's the most ridiculous tech invention you secretly wish existed?
5. Can AI write better jokes than humans, or is it already trying too hard?
6. What would happen if engineers designed fashion trends?"
7. If you could unsubscribe from life updates as easily as emails, what would you block?

DO YOU NEED A Digital Detox?

- 1 I RARELY READ AN ARTICLE FROM BEGINNING TO END.
True → False
- 2 MY VISION GOES BLURRY AFTER LOOKING AT A SCREEN FOR A FEW HOURS.
True → False
- 3 LATELY I HAVE HAD PROBLEMS MAKING UP MY MIND.
True → False
- 4 I KEEP BUMPING INTO THINGS.
True → False
- 5 IF MY PHONE DIED I WOULDN'T KNOW WHAT TO DO, WHERE TO GO OR WHO TO CALL.
True → False
- 6 I HAVE CHECKED MY EMAIL DURING THE PAST THREE MEALS THAT I HAVE EATEN.
True → False
- 7 WHEN I CHECK MY SOCIAL MEDIA FEEDS, I FEEL NEGATIVE ABOUT MY OWN LIFE.
True → False
- 8 I USE HASHTAGS EVEN WHEN I'M NOT ON INSTAGRAM OR TWITTER.
True → False

SCORING
 0-2 YOU ARE OK
 3-5 CUT BACK
 6-8 UNPLUG RIGHT AWAY

- Which company is known for creating the robot named "Spot"?**
- a) Boston Dynamics
 - b) Tesla
 - c) Honda
 - d) Apple



1. Which technique used to reduce the dimensionality of a dataset while retaining the most important information?
2. In machine learning, which algorithm is commonly used for classification tasks where the goal is to predict discrete labels (e.g., spam or not spam)?

