

Message from Desk of Editor



Dr. Rama Kant
Editor-in-Chief

We are glad to bring out the Issue 1 of Vol. 2 of our eNewsletter **TECHKNACK**. Carrying forward our agenda of information clubbed with entertainment, this issue features variety of news and soft features. This issue addresses new joining, departmental activities, faculty achievements, student achievements and new technologies that came into existence.

I really appreciate the efforts done by Er. Aman Agrawal, Asst. Professor and Mr. Govind Ram, Programmer cum Technical Assistant.

Techknack is thankful to all who contributed to this issue. We are equally open to comments, criticism and suggestions to make it more informative.

OTHER ACHIEVEMENTS

Fourth Year TOPPERS

- ▲ Atisha Sharma
- ▲ Mayank Prajapati
- ▲ Kushagra Gautam

Third Year TOPPERS

- ▲ Ishika Panwar
- ▲ Vikas Yadav
- ▲ Cheshtaa Bhardwaj

Second Year TOPPERS

- ▲ Dimple Sharma
- ▲ Aarzoo Ahuja
- ▲ Manoj Jain



Chestaa Bhardwaj
3rd Topper - 79.69%
in 3d Year



Kushagra Gautam
3rd Topper - 79.68 %
in 4th year



Atisha Sharma
First Topper - 83.15%
in 4th year



Ishika Panwar
First Topper - 82.45%
in 3rd year



Dimple Sharma
First Topper - 86.74%
in 2nd Year



Vikas Yadav
2nd Topper - 79.75%
in 3rd Year

FEW NOTABLE ALUMNI



Madhuri Goyal
IBM



Kunal Mehta
Infosys



Payal Kumari
Capgemini



Rahul Gaur
Cloud LLP

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TECHKNACK eNewsletter

GL BAJAJ GROUP OF INSTITUTIONS (AN INTEGRATED CAMPUS)

What's Inside

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About CSE Department

The Department of Computer Science & Engineering at GL Bajaj Group of Institutions, Mathura was established in the year 2009 with a vision to help the IT boom and fulfill the need of dynamic Software Engineers globally. Since then, especially in the last ten years of the IT revolution, the department has taken long strides and is now among one of the best department in the college. The Department aims to nurture students in terms of modern computer techniques and to prepare them, to cope well with the technical advancements in future. Computer Science being the flagship branch of Engineering takes focus in scientific research, scientific programming and software engineering.

- New Joinings -

Four teaching staffs joined the department.

Department of CSE welcomes Er. Sonika, Dr. Kanta Prasad Sharma, Er. Santosh Swarnkar, Er. Jayati Krishna Goswami (joined as Assistant Professor).

Er. Sonika has done her B.Tech in Computer Science Engineering and M.Tech. in Computer Science and Engineering. Her area of specialization is Cyber Security. She is having 8 years experience.in-corporate and teaching.



Dr. Kanta Prasad Sharma has a rich experience of more than 12 years as an innovative academician. Dr. Sharma has Ph.D. in CSE from Amity University & Master from UPTU (Uttar Pradesh Technical University) Lucknow, India. He has published 10+ research papers in with SCI & SCOPUS indexing international Journals and Conference Proceedings and also the Member of ACM; Computer Society of India, IEEE. He has been engaged as faculty guide for more than 15 undergraduate and graduate students and also supervising five M.Tech students. He has received the best research paper award at international conferences, Innovative Teacher Award 2019.



Er. Santosh Kumar Swarnkar, M. Tech. - CS from RGPV, Bhopal. He has completed my B. Tech. - IT from UPTU, Lucknow. Since session 2005-06, He is regular in teaching profession and have taught so many reputed Engineering Colleges and Universities, some of them are KIET Group, Ghaziabad; SGI Group, Agra; GLA University, Mathura etc. Currently working in GL Bajaj Group, Mathura as Assistant Professor in CSE Deptt. Areas of interest are Data Structure, DAA, DBMS, OS and COA.



Jayati Krishna Goswami has done his M.Tech and B.tech in Computer Science and Engineering. His area of specialization in Digital Image Processing and Computer Vision. During his M.tech course, he has done research work on Facial Expression Recognition System.



- Departmental Activities -

-Summer PDP Training-

Personality development program has been organized in summer for overall development of students.



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- Departmental Activities -

Barclays Training Program

7 days training program has been conducted by Barclays for developing soft skills among students.



Training and Interviews of students are also conducted through video conferencing by experts from Barclays training center.

Technotsav 2019

Annual technical fest under the aegis of TECHNOWAVE Society of CSE department has conducted on 12 Oct. 2019 at Institute level.



Students have participated with enthusiasm in following events.

1. Technical Poster
2. Just a Minute
3. Technical Quiz
4. Heckthon
5. PubG Game



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- Departmental Activities - -Alumni Connect Program-



2017 passout students Er. Payal Kumari, Er. Kunal Mehta, Er. Madhuri Goyal, Er. Rahul Gaur and Er. Shubhanshi Singh at CSE Department on 1 Nov. 2019.

-Industrial Visit-

3rd year students have visited Network Bulls at Gurgram, Haryana



-Teacher's Day Celebration-



- Faculty Achievements -

- Er. Sanjiv Agrawal has successfully completed 12 weeks FDP on “The Joy of Computing Using Python” from NPTEL in Elite Group. (Feb. 2019- May 2019)
- Er. Aman Agrawal has attended 6 days FDP on “Introduction to Programming: A Pedagogical Approach” at IIT Kanpur. (May 2019)
- Er. Mohd. Aamir Khan has attended 6 days FDP on “Data Analytics with Python” at IIT Kanpur. (Sept. 2019)

You did it!
Congratulations

- Student Achievements -

Sports Fest 2019-20

- Sahil Kumar has got 1st position in 200 mts Race at Dr. Abdul Kalam Sports Fest 2019-20 (Agra Zone).
- Deepa GC has got 3rd position in 200 mts Race (Girls) at Dr. Abdul Kalam Sports Fest 2019-20 (Agra Zone).
- Shubhi Johri has got 3rd position in Javelin Throw (Girls) at Dr. Abdul Kalam Sports Fest 2019-20 (Agra Zone).
- Sahil Kumar has got 2nd position in 100 mts Race at Dr. Abdul Kalam Sports Fest 2019-20 (Agra Zone).
- Deepa GC has got 2nd position in 100 mts Race (Girls) at Dr. Abdul Kalam Sports Fest 2019-20 (Agra Zone).

Technotsav 2019

Students have participated and win the prizes in different events in institute level fest Technotsav-2019

Technical Poster

Utkarsh Saxena 1st

Just a Minute

Kratagya Agrawal 1st
Madhavam Saxena 2nd

Technical Quiz

Shivang Shaha 1st

Heckthon

Prafull Agrawal 1st
Vivek 2nd
Pankaj 3rd

PubG Game

Aditya Rajawat Ist
Sumit Kumar Ist

Well Done!

- Student Achievements -

RESEARCH PUBLICATION

- Deepanshu et.al. "Analysis of user behaviour on Microblogging Site using a Topic" in *Advanced Machine Learning Technologies and Applications (AMLT) 2020 (Accepted)*



- Latest Trends & Technologies -

CYBER-PHYSICAL SYSTEM

The vision of Cyber-Physical System (CPS) is that of open, ubiquitous systems of coordinated computing and physical elements which interactively adapt to their context, are capable of learning, dynamically and automatically reconfigure themselves and cooperate with other CPS (resulting in a compound CPS), possess an adequate man-machine interface, and fulfil stringent safety, security and private data protection regulations.

Nowadays CPS are being conceived and chances are high that they will be widely used in the near future.

A first step towards CPS is given by networked embedded systems whose operations are monitored, coordinated, controlled and integrated by a distributed computing and communication core. CPS potentially can change the way individuals and organisations interact with and control the physical world, and be as revolutionary as the internet technology was and still is. The transition of economy and society seems inexorable and disruptively leads to value-added chains and economic ecosystems spanning over diverse domains.



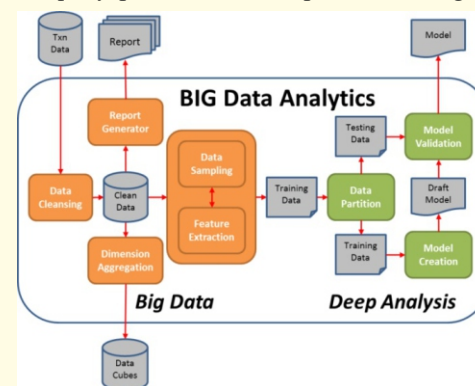
VIRTUAL REALITY

The virtual-reality surgical simulator signals the beginning of an era of computer simulation for surgery. The surgical resident of the future will learn new perspectives on surgical anatomy and repeatedly practice surgical procedures until they are perfect before performing surgery on patients. Primitive though these initial steps are, they represent the foundation for an educational base that will be as important to surgery as the flight simulator is to aviation. It is anticipated that the full development of the surgical simulator will take less than the 40 years which was required for flight simulators to become an indispensable ingredient of pilot training. As the system evolves, many new and yet-to-be-imagined applications will arise, but we must have understanding and patience as we wait for computer power to improve to a point where VR surgical simulation can emerge from its PacMan era.



BIG DATA ANALYTICS

Big Data represents a new era in data exploration and utilization, and IBM is uniquely positioned to help clients navigate



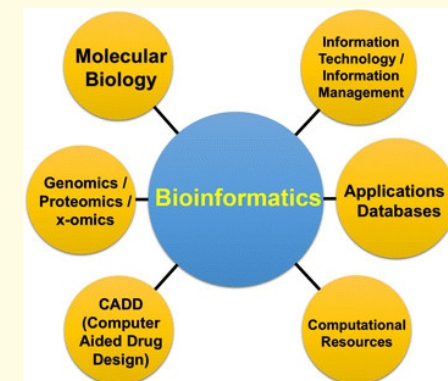
this transformation. This book reveals how IBM is leveraging open source Big Data technology, infused with IBM technologies, to deliver a robust, secure, highly available, enterprise-class Big Data platform. The three defining characteristics of Big Data--volume, variety, and velocity--are discussed.

Tools

- Apache Hadoop
- CDH (Cloudera Distribution for Hadoop)
- Cassandra
- Knime
- Datawrapper
- MongoDB
- Lumify
- HPC
- Storm
- Apache SAMOA
- Talend
- R

BIO-INFORMATICS

Bioinformatics, a hybrid science that links biological data with techniques for information storage, distribution, and analysis to support multiple areas of scientific research, including biomedicine. Bioinformatics is fed by high-throughput data-generating experiments, including genomic sequence determinations and



measurements of gene expression patterns. Database projects curate and annotate the data and then distribute it via the World Wide Web. Mining these data leads to scientific discoveries and to the identification of new clinical applications.

QUANTUM COMPUTING

The subject of quantum computing brings together ideas from classical information theory, computer science, and quantum physics. This review aims to summarize not just quantum computing, but the whole subject of quantum information theory. Information can be identified as the most general thing which must propagate from a cause to an effect. It therefore has a fundamentally important role in the science of physics. However, the mathematical treatment of information, especially information processing, is quite recent, dating from the mid-20th century. This has meant that the full significance of information as a basic concept in physics is only now being discovered. This is especially true in quantum mechanics.

