

Message from Desk of Editor



Ankur Saxena
Editor-in-Chief

We are glad to bring out the Issue 1 of Vol1 of our eNewsletter **TECHKNACK**, which also happens to be our first online publication. 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 **Mr. Vivek Bhardwaj** - Programmer & Analyst, in designing **TECHKNACK** - eNewsletter to make this dream come true.

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



Arpit Gupta
First Topper - 84.3 %
in 3rd year



Mukund Varshney
Third Topper - 79.2 %
in 3rd year



Anshum Sharma
Placement in IBM, United Health
& Newgen Technologies



Rishabh Goyal
Placement in MindTree & Infogain

OTHER ACHIEVEMENTS

Third Year TOPPERS

▲ **Mani Agrawal** - 81.85%

Second Year TOPPERS

- ▲ **Atisha Sharma** - 82.90%
- ▲ **Kushagra Gautam** - 81.55%
- ▲ **Mayank Kr Prajapati** - 78.90%

First Year TOPPERS

- ▲ **Mohit Rawat** - 84.70%
- ▲ **Vikas Yadav** - 84.40%
- ▲ **Ashish Verma** - 83.90%

FEW NOTABLE ALUMNI



Madhuri Goyal
IBM

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Kunal Mehta
IBM & INFOGAIN



Ankur Bajpai
IBM

TECHKNACK eNewsletter

GL BAJAJ GROUP OF INSTITUTIONS (AN INTEGRATED CAMPUS)

What's Inside

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Learning is a lifelong process. Education is more important affair in our life than learning or being literate. The newsletter is a good way to learn about developments and activities and let others know. I congratulate all the people who have been associated with this publication.



DR. R K Agrawal
Chairman

It is wisely said that change is the only thing that is permanent in life. So be it, for the department as well. Since this is for first time, the eNewsletter is introduced, I congratulate the editorial board, advisory board and the department for the very first step towards online publication. I hope everyone would be benefited with it.



MR. Pankaj Agrawal
Vice-Chairman

As we all know, a newsletter mirrors a college, a department, its vision and mission. It also highlights events, activities and academic prowess and achievements. I congratulate the department for its first eNewsletter. I do hope that this will encourage many more including students to use it as a platform to express their creativity.



DR. L K Tyagi
Director

Latest Trends & Technologies

- ☑ Bots that talk more like people
- ☑ Location detection when GPS doesn't work
- ☑ Engineers design artificial synapse for "brain-on-a-chip" hardware
- ☑ New depth sensors could be sensitive enough for self-driving cars

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- New Joinings -

Four (04) teaching and two (02) technical staffs joined the department.

Department of CSE welcomes Er. Ankur Saxena (joined as Associate Professor and HOD), Er. Ramakant Baghel, Er. Vipul Narayan and Er. Brijesh Gupta (joined as Assistant Professor).

Department also welcomes Mr. Gaurav Saxena and Mr. Ilyas Rayeen who have joined the department in the capacity of System Administrator and Lab Technician respectively.

A Nagpur University alumnus, Ankur Saxena specializes in Digital Image Processing. He completed his B. Tech from Nagpur University, and earned M. Tech from UPTU-Lucknow in Computer Science Engineering. He has submitted Ph.D. at Uttarakhand Technical University, Dehradun. His area of research is Digital Watermarking (in particular) and Digital Image Processing (in general). He has more than 18 years experience of teaching in Graduate and Post-Graduate levels. His subjects' interests are Advance Computer Architecture, Operating Systems, Software Engineering, Digital Image Processing and Computer Networks. Mr. Saxena is a student member of IEEE & Ex-Student Branch Coordinator of CSI Student Chapter. He has published 14 research papers in International Journals, National Journals & International Conferences.



Baghel has published 5 research papers in International Journals & International Conferences.

Vipul Narayan has done his B.Tech in Computer Science Engineering and M.Tech. in Information Technology. His area of specialization is Database Security. During his M.Tech, he has done research work on Ensuring Data Integrity in Distributed System Architecture. He has 13 research papers in his cap, out of which 4 was published in IEEE conference, 3 in National Conferences, 4 in International Journal, 2 papers in SCI mago (Indexing in Scopus) and 1 paper is communicated in SCI Journal. His current research interest topic is Big Data Analytics.



Brijesh Gupta has completed his B.Tech in Computer Science Engineering from UPTU, Lucknow and M.Tech in same from NITTR, Chandigarh. He has more than 10 years experience of teaching in Graduate and Post-Graduate levels. He has many research papers in International Journals & International Conferences in his cap.



Mr. Gaurav Saxena is a Microsoft Certified Systems Engineer (MCSE). He has a good experience in networking and troubleshooting. In total, he has 11 years of experience in serving various organisations.



Mr. Ilyas Rayeen is an engineer by experience and profession. He has knowledge repairing computer parts at component level.



Rama Kant Baghel has completed his B.Tech and M.Tech in Computer Science Engineering from UPTU, Lucknow. He has recently submitted his Ph.D. at Dr. APJ Abdul Kalam Technical University, Lucknow. His research area can be broadly classified as Formal Methods and Verification of Large Systems; Semantics of Concurrent Programming Languages. Mr. Baghel has more than 10 years experience of teaching in Graduate and Post-Graduate levels. His subjects' interests are Automata Theory and Formal Languages, Design and Analysis of Algorithms, Concurrent Systems, Data Structure, Compiler Design, Distributed Systems, C language and Computer Networks. Mr.



- Departmental Activities -

Training cum Workshop on Cyber Security

21st August - 22nd August, 2017

A two day training cum workshop program on Cyber Security was organised by Innovative Ideas InfoTech in association with Dr. APJ Abdul Kalam Technical University, Lucknow to spread awareness about the cyber problems such as phishing, account hacking, fake facebook profiles, fake mailing, threat mails, ATM card cloning and various other latest cyber-crimes.



On first day of program, Er. Ankur Saxena, Associate Professor and Head, CSE department welcomed Mr. Rahul Mishra from Innovative Ideas InfoTech. Er. Ankur Saxena also briefly introduced the cyber security and its need in the life of engineering students as well as other persons using social media and other platforms. About 300+ students and faculty members from all the departments participated on first day sessions. All sessions were free of cost for first day.

Total 82 students were registered for 2nd day. The technical training as well as basic concepts about cyber security was discussed in sessions from morning to evening. Hand-on practice was also carried out by the students. Entire workshop was well supported by all the faculty & staff members of CSE & ECE departments and student coordinators Mr. Swetank Sinha and Mr. Mohd. Shadab of CSE-3rd Yr.

The event was successfully coordinated by Er. Sanjiv Agarwal and Er. Rama Kant, assistant professors from department of CSE.

Students were well acquainted with cyber security concepts and practice. Both students and faculty members enjoyed the sessions in two day workshop and training.

Workshop on Python

31st August - 1st September, 2017

A two day training cum workshop on Python was organised by Softpro India Computer Technologies (P) Limited, Lucknow in association with Dr. APJ Abdul Kalam Technical University, Lucknow to provide basic concept & practical exposure of Python language coupled with a mini project.



First day of workshop, was opened with a start speech by Mrs. Deepti Rathore. Er. Ankur Saxena, Associate Professor and Head, CSE department

welcomed Ms. Yashi Asthana, CEO, Mr. Sanjiv Agarwal, Program Coordinator, CSE department welcomed Mr. Brijesh Mishra, IT Manager and Ms. Vinita Mathur, officiating HOD, ECE department welcomed Mr. Rohit Kumar, Project Manager from Softpro India Computer Technologies (P) Limited, Lucknow.

Er. Ankur Saxena briefly introduced the need and application of Python language in current scenario. Next, talk was given by Ms. Yashi Asthana and she had given a presentation regarding the profile of Softpro company and expertise of company in software technologies. Mr. Brijesh Mishra introduced the concepts of Python language, microcontroller (Raspberry PI) programming and lab practices. About 125+ students and faculty members from CSE and ECE departments participated on first day sessions.



The second day of workshop was started with the concepts of web developments and database connectivity using Python. The technical training as well as basic concepts about Python was

- Departmental Activities -

discussed in sessions from morning to evening. Hand-on practice was also carried out by the students under the guidance of Mr.



Brijesh Mishra and Mr. Rohit Kumar. The workshop was concluded with vote of thanks by Er. Rama Kant. Entire workshop was well supported by all the faculty & staff members of CSE & ECE departments and student coordinators Mr. Swetank Sinha, Mr. Mohd. Shadab & Mr. Manish Yadav of CSE-3rd Yr. The event was successfully coordinated by Er. Praveen Kumar Rai and Er. Rama Kant, Assistant Professor, Department of CSE.

Students were well versed with concepts of Python, database connectivity, web development and practice. Both students and faculty members enjoyed the sessions in two day workshop and training.

Guest Lecture on Education at Overseas

A guest lecture was organized on Education at Overseas by Ms. Vasundhara Khandelwal, who after her four years of expertise and success in Jaipur, has now desired to do something for the local students of this region. She has been an

IELTS and TOEFL trainer along with giving expert guidance in foreign admissions. She has successfully sent students to USA, UK, Singapore, Australia and universities in India. Her presence and her seminar gave the students a beak of hope and gave them a chance to dream big and strive for more. She discussed several aspects of education at overseas and about the aspect that if someone is desired to go overseas then what is the right information which is needed to enter. Students have shown remarkable interest in knowing about education exposure and scholarship options at overseas. She presented a lot of hidden aspects about education and the process of learning at overseas level. Er. Ankur Saxena, HOD-CSE department welcomed the guest speaker of the day. A one of its kind seminar, covering the areas of the opportunities available to the students, was conducted in the college. It covered the chances students can avail in India as well as the prospects available abroad. It briefed the students about the application process, editing of the statement of purposes, letters of recommendation, application form filling, shortlisting of universities and visa counselling. Amongst the options available in India, the students were acquainted with the aspect of gaining from the courses that are available in the education system, apart from the usual vanilla programs like engineering or MBA. It was a revelation for the students. Students of department of CSE, ECE and MBA were present during the seminar. Along with the students all faculty members have attended the seminar. At last, vote of thanks was given by Mr. Jitendra Singh, HOD-MBA.

- Faculty Achievements -

ER. Ankur Saxena (Assoc. Professor & HOD) received Best Paper Award

ER. Ankur Saxena (HOD - CSE) received *Best Paper Award* at the *International Conference, RICSIT-2017* held on 19th May 2017 organized by Department of Computer Science in collaboration with University Institute of Information Technology (UIIT), Himachal Pradesh University at Shimla, India. This paper got published in *Journal of Telecommunication, Electronic and Computer Engineering (JTEC)*, Universiti Teknikal Malaysia Melaka (UTeM), Malaysia (Free Scopus Indexed Journal) ISSN: 2180-1843 eISSN: 2289-813. JTEC is currently abstracted and indexed in SCOPUS (Q4), Google Scholar, Malaysian Journal Management System (MYJurnal) and Malaysian Citation Index (MYCite). The special issue has been published as Vol.9 No 3-6 and can be accessed through this link: <http://journal.utm.edu.my/index.php/jtec/issue/view/150>. The article can also be accessed using <http://journal.utm.edu.my/index.php/jtec/article/view/3037>.



Congratulations!

- Student Achievements -

Virendra, a second year student is running a Foundation for Kids Education

Virendra, a second year student, is running a Foundation for Kids Education since Sep.05, 2013. He has met Dr. Govindjee, who is an Indian-American scientist and educator, three months ago in Delhi regarding his contribution for society. Dr. Govindjee has appreciated his



work and motivated him to continue. One month ago, he has opened a library in his village where anyone can come for study. Many children study in late night, that why library is open 24 hours. He is also working on



spreading education in villages. His team arrange seminars in rural areas to motivate peoples towards education. He has started with two(02) children and today he has strength of more than 500 and approximate 400 to 450 children are going to school regularly. He has been known and helped for his work not only in India but also in countries like USA and Izrail.



Utkarsh, a first year student turns out to be a young technologist

Utkarsh, a first year student, with his own has created applications that can create quick response code for specific task as QR code for message, text, link and get easily it in .pdf file; html++ (version 1) application for Windows 10 that include html tools

for designing webpages having variety of features such as automatically generate html source file from part wise codes, notepad control for users, smart copy feature to reduce copy time by select text and deselect, view any html source code by open file, save file as .htm or .html, can save file as .js or .css, advance body board for important body elements, head elements quick input by buttons, good and clean user interface, give a simple way to produce web page, smart calculator integration for calculations, colour picker, html reference for html beginners and can easily share your codes by email; created a simple chat room for a group with security and privacy where multiple user can send multiple messages at a time and created a personal music cloud where we can upload our own music files, can easily search files and fully customised html5 player for music play.



We can get instant QR code on <https://instantcode.ooowebhostapp.com>, download html++ from https://drive.google.com/file/d/oB6oWfZWC-kSnWkpzeEM1WklPY2c/view?usp=drive_web, use chat room at <https://sharing-wonder.ooowebhostapp.com> and access personal music cloud at <https://ucmemusic.ooowebhostapp.com>.



Swetank and Savitanshu, the third year students, secured first position

The students of third year has participated in zonal art and cultural competition organised by BSA Engineering College, Mathura in association with Dr. APJ Abdul Kalam Technical University, Lucknow and has secured first position in Band War



- Student Achievements -

FactWish developed by Arpit Gupta, a fourth year student

Arpit Gupta, a fourth year student has chosen web development as career. He has created dozens of sites during past 3 years including an e-commerce and e-toll payment site. The problem with them was that they required lot of investment, and had no scope. He loves reading facts from social media sites. One day while scrolling them, he found that most of the facts shown were fake and not true, thus giving false knowledge to people. At that moment he thought of creating a website which would provide



true facts on different topics at a single place, so that people can avoid reading from false sources. *FactWish* is a one stop site which provides unique, interesting and mind blowing facts from all around the world on anything including food, culture, people, technology, space, lifestyles and much more. Topics on which *FactWish* focuses are Food, Psychology, Technology, Space, Disaster Management, People, Countries, Health, Histories, World etc. According to him, all the facts shown on site are 100% original, thus promoting true information, providing facts in simple language to make it easy to understand for people. *FactWish* was developed in December 2017 that uses PHP, MySQL, Ajax and jQuery.



First year students secured second position in Brij Literature Festival'18

Aarzoo Ahuja, Alisha Saifi, Aman Sharma, Anu Singh, Ayush Verma, Kalpana Chaudhary, Monika Saraswat, Muskan Sharma, Nishant Gola, Prafull Agrawal, Priya Arora, Priyank Varshney, Saurabh Singh and Yukti Agrawal of first year have participated in Brij Literature Festival'18 organised by GLA University, Mathura and have secured second position in Rang Manch.



- Latest Trends & Technologies -

Bots that talk more like people

AI platform allows chatbots to draw on robust language database to better navigate human conversation.

Rob Matheson | MIT News Office
January 23, 2018

Giant Otter Technologies, founded by artificial intelligence video game developer Jeff Orkin, an MIT Media Lab alumnus, has developed a platform that uses AI algorithms and crowdsourced annotators to build a natural-language database that helps chatbots expertly navigate human conversations.



Location detection when GPS doesn't work

Theoretical study shows how to make wireless localization much more accurate.

Larry Hardesty | MIT News Office
January 22, 2018

A new theoretical analysis of wireless localization systems represents settings of a wireless network (yellow) and measurement error (purple) as three-dimensional spaces. The intersection of the two spaces defines the network's optimal configuration.



Engineers design artificial synapse for "brain-on-a-chip" hardware

Design is major stepping stone toward portable artificial-intelligence devices.

Jennifer Chu | MIT News Office
January 22, 2018

When it comes to processing power, the human brain just can't be beat. Researchers in the emerging field of "neuromorphic computing" have attempted

to design computer chips that work like the human brain. Instead of carrying out computations based on binary, on/off signaling, like digital chips do today, the elements of a "brain on a chip" would work in an analog fashion, exchanging a gradient of signals, or "weights," much like neurons that activate in various ways depending on the type and number of ions that flow across a synapse.

New depth sensors could be sensitive enough for self-driving cars

Computational method improves the resolution of time-of-flight depth sensors 1,000-fold.

Larry Hardesty | MIT News Office
December 21, 2017

Comparing of the cascaded GHz approach with Kinect-style approaches visually represented on a key. From left to right, the original image, a Kinect-style approach, a GHz approach, and a stronger GHz approach.



Can computers help us synthesize new materials?

Machine-learning system finds patterns in materials "recipes," even when training data is lacking.

Larry Hardesty | MIT News Office
December 21, 2017

A new machine-learning system for analyzing materials "recipes" uses a variational autoencoder, which squeezes data (left-hand circles) down into a more compact form (center circles) before attempting to re-expand it into its original form (right-hand circles). If the autoencoder is successfully trained, the compact representation will capture the data's most salient characteristics.

