



DEV BHOOMI
—UTTARAKHAND—
UNIVERSITY

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NEXGEN

A NEWSLETTER

VOL 3, ISSUE-1, Aug-Oct 2022

**SCHOOL OF ENGINEERING
AND COMPUTING**

"All the latest from CSE"

Student Editorial Team

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- **Rishabh Tyagi**
- **Satyam**
- **Khushi Aggarwal**
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- **Arihant**

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Ms. Urvashi Rawat



Mr. Sanjay Bansal
Chancellor, DBUU

Message from **Chancellor**

It gives me hearty pleasure & immense pride and to see such tremendous growth of our university in areas of research, industrial visits and many more activities in yet another issue of our newsletter NEXGEN. My vision is to provide students an excellent platform to bring out their hidden potential and talent and groom them so that they succeed in their life and reach at utmost height. I feel as we are organizing many events such as international conference, visits to various research institutes like UCOST, IIRS and many more. These opportunities provide a great platform to our students in achieving overall growth. Our university has a goal to provide all our students with confidence, discipline, clarity in thoughts and decision-making ability to set and achieve goals and all social responsibility all through their lives which would help them grow mentally and physically in a great human being who adds to our society and nation. I would like to congratulate the entire team behind NEXGEN for working tirelessly in contributing to the growth of our university and would also encourage all the students and faculty members to read and research more enthusiasm and will as I believe in the words “Success comes to those who work hard and stays with those who, who don't rest on the laurels of the past”.



Dr. Ritika Mehra
Dean, SoCSE

Message from **Dean's Desk**

With a new edition of our newsletter I am delighted to share with all of you our various milestones we achieved starting various Research publications encouraging future skills courses like B.Tech CSE Data Science Specialization with industry ready programs like BCA (Data Science) and B.Sc. (Animation & Gaming) for our upcoming session (2022-23) where we saw a huge rise in admissions. Any input, encouraging thoughts which brings out a brighter edition are welcome from all our editors and readers of the newsletter. INDUSTRIAL VISITS which help our students gain a better version of theory taught to them so we had various visits in research organizations like IIRS, UCOST etc. With this we also want our students to take up a very important cause “ENVIRONMENT” so we also did a visit to FRI. SoCSE believes in constant upgradation of knowledge so we had various seminar on Cyber Security, Micro services, IOT etc where we bring Industry experience for our student's knowledge base. I would like to end my thoughts with a vision to encourage more readers to join us:

Reading is important. If you know how to read, then the whole world opens up to you – Barack Obama

Message from **Program Coordinator B.Tech CSE**



Mr. Govind S Panwar
Program Coordinator, B.Tech

Our hearty wishes to all the readers of NEXGEN!

I would like to thank all my colleagues for their tireless efforts to take out this edition of newsletter. "Scientists study the world as it is, engineers create the world that has never been. Strive for perfection in everything you do. Take the best that exists and make it better. When it does not exist, design it. The ideal engineer is a composite ... He is not a scientist, he is not a mathematician, he is not a sociologist or a writer; but he may use the knowledge and techniques of any or all of these disciplines in solving engineering problems."

Message from **Program Coordinator BCA/ Bsc(IT)**



Ms. Urvashi Rawat
Program Coordinator, Computer Application

Great Things in Business are never done by one person. They're done by a team of people" – Steve jobs. With this fantastic quote I would like to thank and congratulate Team NEXGEN for one more fabulous and informative newsletter. With a strong vision to inculcate industry ready skills in our students we regularly conduct sessions where our students learn about various latest techniques and technology such as UX/UI design, Blockchain, Digital Marketing, AI/ML, Data Science, Health-tech, RPA, Fintech, Gaming & Animation, Management, Entrepreneurship & more.

Message from **Program Coordinator M.Tech CSE & MCA**



Mr. Pankaj Pratap Singh
Program Coordinator, MCA, MTech

"Wear your failures as a badge of honor." SundarPichai – The CEO Of Google. Reinvent yourself, take risks and keep trying until the things start to workout in the long run. Think big and try to do something that excites you and even if it fails, wear it as a badge of honor and try again. Work with people who make you feel insecure, they are the people who are better than you, if you feel very secure in what you do and you are comfortable with it that means you are not pushing yourself, pushing to the limits is a crucial part of learning. I would like to thank and congratulate Team NEXGEN for a informative newsletter.

List of New Joining Faculty Members

SoEC Faculties

Sl. No.	Name	Designation	Sl. No.	Name	Designation
1.	Mr. Maneesh Kumar	Assistant Professor PhD (Submitted NIT)	9.	Ms. Urvashi Rawat	Program Coordinator BCA, BScIT
2.	Mr. Deepak Kumar Singh	Assistant Professor	10.	Mr. Pankaj Pratap Singh	Program Coordinator M.Tech, MCA
3.	Dr. Upendra Verma	Assistant Professor Ph.D IIT Roorkee	11.	Mr. Naseem Saifi	Assistant Professor
4.	Ms. Hemlata	Assistant Professor	12.	Mr. Govind Singh Panwar	Program Coordinator B.Tech CSE
5.	Mr. Yudhveer	Assistant Professor Pursuing PhD	13.	Mr. Manoj Singh Adhikari	Assistant Professor
6.	Mr. Dinesh Chopra	Assistant Professor	14.	Mr. Rohit Goel	Assistant Professor
7.	Ms. Jaishree Agrawal	Assistant Professor	15.	Mr. Rakesh Arya	Assistant Professor
8.	Mr. Sumit	Assistant Professor			



Research Articles Published / Accepted in Book Chapters

S.No.	Name	Title	Journal	Status	Year
1.	Ashish Gupta, Gunjan Bhatnagar	Detection of Anomalous Fire Using Deep Learning Techniques	Neuro Quantology	Published	July 2022
2.	Nafees Pharooqui Dr. Ritika Mehra	Concatenated deep features with modified LSTM for enhanced crop disease classification	International Journal of Intelligent Robotics and Intelligence (Springer Nature)	Published	Oct 2022
3.	Upendra Kr. Verma	Charge transport in quantum dot sensitized solar cells: a mathematical model	Solar Energy Volume 245	Published	Sept 2022

Patent Filed

Mr. Akhilesh Pandey has filed a patent with title "Efficient Machine Learning Model for identifying objects in wireless sensor networks" with Application Number 202211044414, Publish Date: 22/07/2022.

Congratulations

Dr. Ekta M Upadhyay has successfully completed the Postgraduate Certificate Program in Data Science and Machine Learning jointly organized by IIT Roorkee and TSW during 08-05-2021 to 20-03-2022. Also, receives Certification of Appreciation for participating in Data Science Hackathan conducted on 4th-5th April 2022, as a part of Certificate Program.

Seminar in The Institute of Engineers

On the occasion of 55th Engineer's Day celebration of **Bharat Ratna, Sir Mokshagundam Visvesvaraya** 15th Sept 2022 Organised by The Institute of Engineers, Dehradun, cse students has been attend the seminar on "Smart Engineering for a Better World".



BCA – 2nd Year

Sr. No.	Name of the Student	Mobile No.
14.	Suraj Kumar	6204451573
15.	Akash Yadav	8999228371
16.	Siddharth Raj	7805361114
17.	Ganesh Kumar	9693780132
18.	Kritika	8532863114
19.	Amkant Jaiswal	7310248552
20.	Neha Bisht	7906594796
21.	Md. Sahil	9548681861
22.	Harshvardhan Dhaila	9927511064
23.	Arjun Negi	7455807085
24.	Aman Singh	9520363939
25.	AbhayBisht	7060529302

List of Students :

B.Tech – 4th Year

Sr. No.	Name of the Student	Mobile No.
1.	Hritik Raj	7033661472
2.	Adtya Singh	7087287738
3.	Anaj Panday	7055689902
4.	Deepak Kr. Sahani	8709653655
5.	Md. Kaif	9368721250
6.	Rishabh Raj	6201448789
7.	Gaurav Gol	7037287736
8.	Dipayan Majumdar	7055689902
9.	Arjun Singh Pundir	8851080086
10.	Sumit Negi	8126556848
11.	Bhupesh Bhatt	7465079034
12.	Abhishek Rawat	7248558253
13.	Tushar Dhanai	7300755395



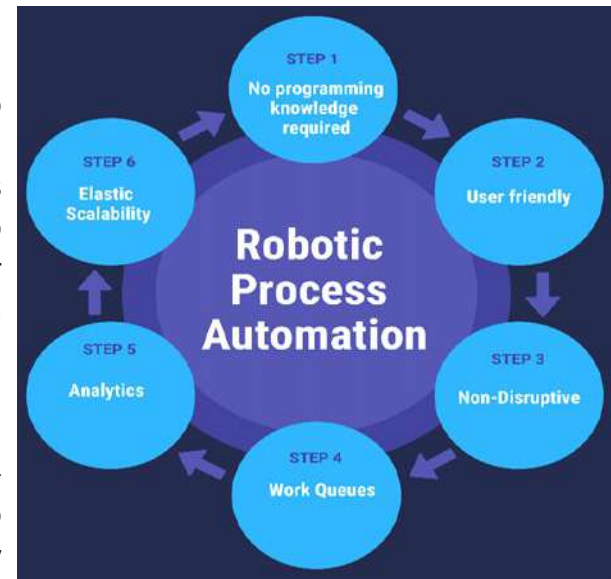
Articles by Students

Robotic Process Automation:

Robotic Process Automation (RPA) is software technology that's easy for anyone to use to automate digital tasks. With RPA, software users create software robots, or "bots", that can learn, mimic, and then execute rules-based business processes. RPA automation enables users to create bots by observing human digital actions. Show your bots what to do, then let them do the work. Robotic Process Automation software bots can interact with any application or system the same way people do—except that RPA bots can operate around the clock, nonstop, much faster and with 100% reliability and precision.

What can RPA do for us ?

Robotic Process Automation bots have the same digital skill set. Think of RPA bots as a Digital Workforce that can interact with any system or application. For example, bots are able to copy-paste, scrape web data, make calculations, open and move files, parse emails, log into programs, connect to APIs, and extract unstructured data. And because bots can adapt to any interface or workflow, there's no need to change business systems, applications, or existing processes in order to automate. RPA bots are easy to set up, use, and share. If you know how to record video on your phone, you'll be able to configure RPA bots. It's as intuitive as hitting record, play, and stop buttons and using drag-and-drop to move files around at work. RPA bots can be scheduled, cloned, customized, and shared to execute business processes throughout the organization.



By: Amarkant Jaiswal
BCA 2nd year

Need of responsive Web Design :

Responsive web design has made the internet much more accessible and interactive for casual users over the last few years. Designers no longer have to limit their creativity when designing a website for multiple platforms—instead, they're free from design constraints and free from developing multiple versions of their project codes. Over 70% of websites traffic come from smartphones. Web designers need to account for all possible device types and screen sizes when creating a new site. I learn about responsive web design while I was working on my project and I was using plain CSS and I had a lot of difficulties making web responsive then I use a responsive Bootstrap framework and it made easy to develop the web page. Using media help a lot in responsive web design, Media query uses the @media rule to include a block of CSS properties and execute only if a certain condition is true. Responsive web design may be hard and time consuming but it worth all your time.



By : Kamlesh Sati, Ayush Panwar
BCA 1st year

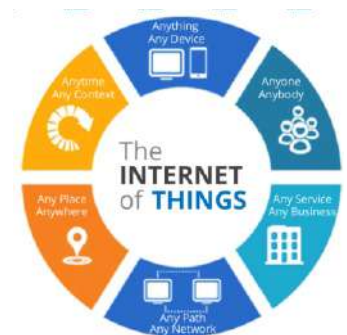
Internet of Things (IoT) :

The Internet of Things (IoT) describes the network of physical objects—"things"—that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet. These devices range from ordinary household objects to sophisticated industrial tools.

Why Internet of Things (IoT) is so important

Over the past few years, IoT has become one of the most important technologies of the 21st century. Now that we can connect everyday objects—kitchen appliances, cars, thermostats, baby monitors—to the internet via embedded devices, seamless communication is possible between people, processes, and things.

By means of low-cost computing, the cloud, big data, analytics, and mobile technologies, physical things can share and collect data with minimal human intervention. In this hyper connected world, digital systems can record, monitor, and adjust each interaction between connected things. The physical world meets the digital world—and they cooperate.



By: Vaibhav
BCA 5th Sem



Seminars & Workshops

Seminar on iOS Based Applications for Machine Learning

Seminar on topic IOS based Applications for Machine Learning and Augmented Reality by **Mr. ALDRIN CASTELINOON**, Chief Executive Officer, Inspire Infotech Pvt. Ltd., Apple Solution Expert Education on 27th August 2022. B.Tech CSE 3rd year students have participated and received certificates.



Workshop on Cyber Security

Workshop on Cyber Forensic Expert, by **Mr. RAHUL KUMAR**, Cyber Forensic Expert, SLOG Solutions Pvt. Ltd. on 27-Aug-2022. BTech, BCA/MCA 1st year students have participated. This Workshop is designed to give a Techniques and hand on Experience on IT Systems Security & Infrastructure, Monitoring Potential Threats and Attacks and implementing Security solutions.

Workshop on Machine Learning using Python

Workshop on topic Machine Learning using Python, by **Mr. SPARSH SINGH**, Machine Learning Expert, CEPTA, on 17-SEPT-2022. BTech(CSE) 2nd Year students have participated. The Trainer shown hands-on how to build own machine learning models. It covered basic machine learning concepts such as regression, classification, over-fitting, cross-validation, and many more.



Online Workshop on Introduction to IoT Eco-System

Online Workshop, on topic Introduction to IoT Eco-System by **Dr. SAMBHUDUTTA NANDA**, Assistant Professor at VIT-AP University, on 26-SEPT-22. BTech(CSE) 3rd year students have participated. The workshop provided participants with a solid technical understanding of the different IoT technologies involved in modern IoT scenarios and its use cases, covering open and standardised technologies.

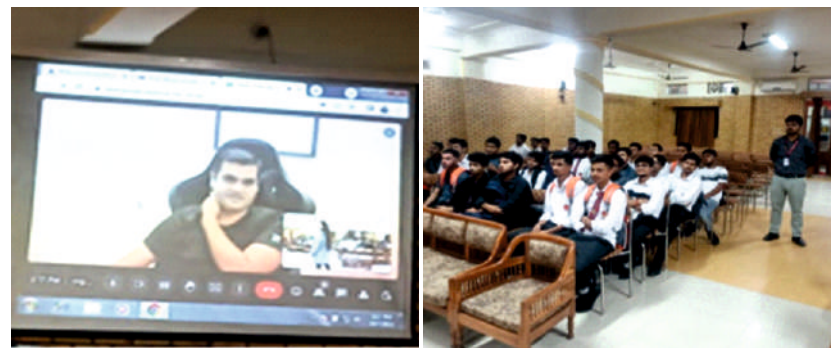
Seminar on Career Options Available after B.Tech

Seminar on Topic Career Options available after B.Tech by **Mr. JITENDRA TIWARI**, Professional Speaker at Made Easy, on 28-Sept-22. B.Tech(CSE) 3rd year students have participated. It was an interactive session, where the students actively participated and came up with their doubts about different options, viz. MS, MBA, job opportunities, etc.



Workshop on Introduction to Microservices

Online workshop on topic "Introduction to Microservices, by **Mr. VIJENDRA RAJPUT**, Principal architect in Infosys, on 07-Oct-2022. BTech(CSE) 3rd year and 4th year have participated.



Guest lecture on Higher Education Options after B.Tech

To promote the welfare of the officers of the Civil Services and to bring them together in order to secure complete integration of the services a Guest Lecture was organized with a Topic "Higher Education Options after B.Tech" by **Mr. SATISH ANAND**, CareerLabs, on 11-Oct-2022. B.Tech(CSE) 3rd year students have participated.



B.Tech CSE Students 2021 Batch (SPECIALIZED IN AI/ML)

29 students of B.Tech CSE Students 2021 Batch with specialization in AI&ML has successfully completed the requirements of AZURE ARTIFICIAL INTELLIGENCE (AI-900) Fundamentals in May 2022.



Industrial Visits

SoEC also encourage students to have industrial knowledge

Visit to Uttarakhand Council of Sciences and Technology (UCOST), Dehradun on 6th Sept. 2022.

UCOST Industrial visits provide the students and opportunity realize how important science and technology is for our innovation. Practical demonstrations help students understand what actually is taught in our classrooms.



Visit to Indian Institute of Remote Sensing, Dehradun on 9th Sept. 2022.

Industrial Visit helps students to gain first-hand information regarding the functioning of the Remote Sensing used by IIRS. Also, provides an insight into the real working environment of the industry which helps them to see their future place in the working world. As environment is a major concern we engage our students to take social and natural causes.



Industrial Visit to Forest Research Institute on 9th Sept. 2022.

The visit to Forest Research Institute helped students to know about importance of natural resources. Students get awareness about various varieties of trees, their uses and life cycle, various insects, etc. through a huge collection in six Museums (Pathology Museum, Social Forestry Museum, Silviculture Museum, Timber Museum, Non-Wood Forest Products Museum, and Entomology Museum). Students were enthusiastic to see the unique architecture and planning of the FRI building.



PLACEMENT



Meet Our Proud
ACHIEVER

 Himanshu Gunwant BCA daffodil	 Aditya Sharma B.Tech CSE daffodil	 Tushar Dhanai B.Tech CSE daffodil	 Vicky Kumar B.Sc IT daffodil
 Vaibhav Dhiman BCA daffodil	 Sanskriti Dhar B.Sc. IT amazon.com	 Avantika Yadav B.Sc. (IT) amazon.com	 Anas Ahmed B.Tech CSE step2gen
 Sachin Bhandari MCA step2gen	 Anuj Pandey B.Tech CSE step2gen	 Naveen Singh MCA step2gen	 Komal Bisht B.Tech CSE step2gen
 Prakhar Pandey B.Tech CSE step2gen	 Hritik Raj B.Tech CSE step2gen	 Chirag Grag B.Tech CSE step2gen	 Aryan Diwakar BCA BENCHMARK
 Himadri Diwan B.Tech CSE BENCHMARK	 Harshit Goyal B.Tech CSE BENCHMARK	 Anuskha B.Tech CSE LEARNING SHALA	 Aditya MCA BIGOH STIMULATE OPTIMISE BELIEVE
 Divya Kishore B.Tech CSE BIGOH STIMULATE OPTIMISE BELIEVE	 Ayush Ranghar BCA BIGOH STIMULATE OPTIMISE BELIEVE	 Anuj Pandey B.Tech CSE BIGOH STIMULATE OPTIMISE BELIEVE	 Praveen Dwivedi MCA Webkul

