

# UDBHAAS

### NEWSLETTER

VOLUME 1 . ISSUE 2 . MARCH 2022

### **Department of Electronics and Communication Engineering**

उद्भास

Jaypee Institute of Information Technology, NOIDA (Deemed to be University under Section 3 of UGC Act 1956)

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# Message from the Pro-Chancellor

I am pleased to endorse the second issue of the departmental newsletter, Udbhaas, a compendium of all the academic, technical and cultural activities carried out in the Department of Electronics and Communication Engineering at Jaypee Institute of Information Technology (JIIT). It has always been heart-warming to see the students of JIIT achieving great heights and making us proud. I am looking forward to many such achievements from the current batches as well.

With the combined efforts and achievements of our faculty members and students, the NIRF ranking of JIIT has improved, and JIIT is again among the top institutes in the NCR. We owe all the fantastic results to the dedicated hard work of our teachers and staff members, and not to forget, the patience and support of our students.

During the challenging times of the COVID-19 pandemic, everyone was suffering, many people lost their loved ones, but hopefully, we all have recovered from that situation. It will be very pleasing to see our valued students achieve great success and knit out my advice - accomplish your goals with passion and positive attitude towards life, as well as focused hard work.

Wishing all of you great success in your endeavours!

With best wishes, Prof. S. C. Saxena Pro-Chancellor Jaypee Institute of Information Technology

# Message from the Vice-Chancellor



I would like to congratulate the Department of Electronics and Communication Engineering (ECE) for presenting the second issue of the newsletter, Udbhaas. The efforts from the editorial team are really commendable. It is great to see that Udbhaas is strengthening the positive perceptions of the Department of ECE and helping students advance in both academic and co-curricular activities.

I believe that the students of Jaypee Institute of Information Technology (JIIT) will skyrocket the institute's name and reputation. It is always encouraging to see how hard everyone is working and contributing to ensure the bright future of the students at JIIT. We are moving forward to achieve the vision of JIIT day by day.

Since some of our beloved students are yet to attend the institute events, I would recommend that they explore the institute and have some adventure while having a focused study; be lifelong learners and heed the advice of your elders as it helps in growth and relieves stress. We hope the upcoming events will be both exciting and enriching for the students. I am looking forward to seeing how much passion and energy you all bring by participating in the institutional activities.

May God bless you all with a very bright future!

With best compliments, Prof. Yog Raj Sood Vice-Chancellor Jaypee Institute of Information Technology

# Message from the Head of Department



On behalf of the Department of Electronics and Communication Engineering (ECE), I extend a warm welcome to you. We started our journey in 2001. Over the years, we have grown our expertise and competence in the core electronics and communication engineering curriculum and research. We have solid undergraduate, postgraduate, and Ph.D. programs. In the past years, the students have exhibited great zeal and enthusiasm and contributed significantly to inter and intracollege activities in various seminars, workshops, conferences, placement programs, and technical and cultural events, which have benefited their overall development and enhanced the reputation of our institute.

It is great to see that our department's teaching and research have many distinguished national and international achievements. I congratulate the faculty members and students of the Department of ECE who have taken the initiative and contributed to the second edition of the departmental newsletter, Udbhaas. It will certainly benefit all the students as they will be inspired to achieve greater heights by knowing the department's achievements.

It is necessary for us to articulate our thoughts and rediscover the field of interest and its relevance from time to time. In some ways, the newsletter contributes to fulfilling this need.

With best regards, Prof. Shweta Srivastava Head of Department Electronics and Communication Engineering

# Message from the Editorial Team

It is our great pleasure to present the second edition of Udbhaas, the newsletter of the Department of Electronics and Communication Engineering (ECE). The editorial team has endeavoured over the past few months to collate this edition of the departmental newsletter.

Udbhaas is a perfect blend of talent, creativity, and success stories featuring the students and faculty members of the Department of ECE at Jaypee Institute of Information Technology. It encloses valuable details that can inspire the students to believe in themselves and their dreams. It also highlights the vision and commitment of the faculty members who put in a lot of effort to prepare the students to be able to walk into the fast-paced world elegantly.

Working for the second edition of Udbhaas was indeed a wholesome experience. We have poured a lot of time, dedication, and hard work into this project. We are very optimistic and are eagerly waiting for the readers' feedback. We hope that our efforts will be worthwhile for the readers' time spent reading the newsletter.

> ॐ असतो मा सद्गमय । तमसो मा ज्योतिर्गमय । मृत्योर्माऽमृतं गमय ॥ – बृहदारण्यक उपनिषद्

Yours sincerely, Editorial Team



#### JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY

### VISION

To become a centre of excellence in the field of Information Technology and related emerging areas of education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.





### MISSION

MISSION 1: To develop as a benchmark university in emerging technologies.

MISSION 2: To provide a state-ofthe-art teaching-learning process and R&D environment.

MISSION 3: To harness human capital for a sustainable competitive edge and social relevance.

### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### VISION

To be a centre of excellence in education, training and research in Electronics and Communication Engineering to cultivate technically competent professionals for Industry, Academia and Society.





### MISSION

MISSION 1: To impart education through contemporary, futuristic and flexible curricula with innovative teaching and learning methods and hands on training with well-equipped labs.

MISSION 2: To carry out cutting edge research in different areas of Electronics and Communication Engineering.

MISSION 3: To inculcate technical and entrepreneurial skills in professionals to provide socially relevant and sustainable solutions.

### Programme Educational Objectives (PEOs)

#### PROGRAMME NAME: B. TECH. IN ELECTRONICS AND COMMUNICATION ENGINEERING

PEO1: To provide a strong foundation in Electronics and Communication Engineering to pursue professional career, entrepreneurship and higher studies.

PEO2: To evolve the capability to analyse, design and develop feasible solutions to real-world problems.

PEO3: To inculcate professional ethics, managerial and communication skills to develop ingenious solutions for the benefit of society and the environment.





PROGRAMME NAME: M. TECH. IN ELECTRONICS AND COMMUNICATION ENGINEERING

PEO1: To provide profound knowledge of modern design tools to solve real-life problems in the field of Electronics and Communication Engineering.

PEO2: To inculcate research skills with ethical attributes for academia and industry.

PEO3: To develop entrepreneurial skills as per industry requirements for providing sustainable solutions to the society.



### Events Organized by the Faculty Members (June-December 2021)

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S. No.	Organizer(s)	Event Name	Speaker(s)	Date
1	Dr. Jasmine Saini, Online Education Cell	Organized webinar on "Copyright Policies for Digital Content"	Dr. K.S. Giridharan, Assistant Professor, Department of Engineering Education, NITTTR Chennai	07 July 2021
2	Dr. Jasmine Saini	Webinar on "Importance of Electromagnetic compatibility in modern communication systems"	Prof. Nisha Gupta, Dean BITS MESRA	23 October 2021
3	Dr. Shamim Akhter, Dr. Satyendra Kumar, Mr. Shivaji Tyagi	Alumni Connect: Webinar on "How to Prepare for GATE Exam" organized for students who were preparing for GATE 2022.	Anupriya (Batch 2018), Tanya (Batch 2019), Shubham Aggarwal (Batch 2019), Harsheeswar Reddy (Batch 2019), Ishan Tripathi (Batch 2021)	06 June 2021
4	Dr. Shamim Akhter, Dr. Satyendra Kumar, Mr. Shivaji Tyagi	Alumni Connect: Webinar on "Research and Master's opportunities in Electronics Industry"	Dr. Abhinav Gaur from Robert Bosch GmbH as Technology Development Engineer	13 June 2021
5	Dr. Shamim Akhter, Dr. Satyendra Kumar, Mr. Shivaji Tyagi	Alumni Connect: Webinar on "Job opportunities for ECE Students"	Mr. Pranay Kinra (Engineer- Project Support and Applications) and Mr. Aseem Srivastsva (Senior R&D Engineer –Test and Measurement) from Rohde & Schwarz Pvt. Ltd.	20 June 2021
6	Dr. Shamim Akhter, Dr. Satyendra Kumar, Mr Shivaji Tyagi	Alumni Connect: Webinar on "World of mm-wave IC design for 5G and related applications"	Mr. Amit Singh (RFIC Design head) Humatics	27 June 2021
7	Dr. Shamim Akhter, Dr. Satyendra Kumar, Mr. Shivaji Tyagi, Dr. Richa Gupta	Alumni Connect: Webinar on " Digital Design Verification"	Mr. Hemant Koka (Staff Verification Engineer) Kioxia America	27 June 2021
8	Dr. Shamim Akhter, Dr. Satyendra Kumar, Mr. Shivaji Tyagi	Alumni Connect: Webinar on "Electronics for Automotive"	Mr. Pranjal Srivastava (Field Application Engineer/Technical Sales) at KEMET, a YAGEO company	04 July 2021



### Events Organized by the Faculty Members (June-December 2021)

S. No.	Organizer(s)	Event Name	Speaker(s)	Date
9	Prof. Shweta Srivastava, Dr. Shamim Akhter, Dr. Alok Joshi	ECE Alumni Entrepreneurs Meet	Mr.Tapan Dixit(2006), Mr.Saurabh Gupta(2007), Mr. Naveen Gupta(2007), Dr. Manish Kumar Gupta(2010), Mr. Nishant Bharti(2011), Mr. Aditya Goel(2011), Ms. Kritika Prasad(2013), Mr. Archit Jain (2014), Mr. Raj Pratap Singh(2014), Ms. Ria Rustagi (2015), Mr. Bhavya Madan (2015), Mr. Nitesh Kumar(2017), Mr. Akshay Singh(2018)	11 July 2021
10	Dr. Shamim Akhter, Dr. Satyendra Kumar, Mr. Shivaji Tyagi	Alumni Connect: Webinar on "Analog IC design: Motivation and Design Strategies"	Mr. Prabhleen Singh (Analog Design Engineer at 3rd iTech)	18 July 2021
11	Dr. Richa Gupta, Capability and Enhancement Development Cell+ECE	Webinar on "Challenges and Opportunities in the Current VUCA Environment"	Mr. Faizan Ahmad, The Hindu Group	18 August 2021
12	Dr. Richa Gupta and Mr. Abhay Kumar, Capability and Enhancement Development Cell+ECE	Webinar on "Troposcatter Communication"	Dr. Rajendra Singh, Sc-F, DEAL, DRDO, Dehradun	10 December 2021
13	Dr. Richa Gupta and Mr. Abhay Kumar, Capability and Enhancement Development Cell+ECE	Webinar on MIMO Technologies by	Sh. Pramod Kumar Verma , Sc-D, DEAL, DRDO, Dehradun	14 December 2021
14	Dr. Richa Gupta and Mr. Abhay Kumar, Capability and Enhancement Development Cell+ECE	Webinar on Antenna Technologies	Sh. Pramendra Verma, Sc-E, DEAL, DRDO, Dehradun	16 December 2021
15	Dr. Richa Gupta and Mr. Abhay Kumar, Capability and Enhancement Development Cell+ECE	Webinar on Radios for Defense Applications - Past, Present & Future	Mrs Jaya Mishra, Sc-F, DEAL, DRDO, Dehradun	17 December 2021
16	Dr. Jitendra Mohan and entire Department of ECE	7th International Conference on Signal Processing and Communication 2021 (ICSC 2021)	Prof. Ram M. Narayanan, Pennysylvania University, USA Prof. Satish Kumar Sharma, San Diego University, USA Prof. Banmali S. Rawat, University of Newada, USA Mr. Deepak Mathur, Director of IEEE Region 10 (Asia Pacific Region) Prof. Parthsarathi Chakrabarti, IIEST Shibpur Prof. Rambilas Pachori, IIT Indore Prof. Kumar Vaibhav Srivastava, IIT Kanpur Prof. Satish Kumar Singh, IIIT Allahabad	25-27 November 2021

# INTERNATIONAL CONFERENCE ICSC 2021



The seventh edition of International Conference on Signal Processing and Communication (ICSC 2021) had received 168 paper submissions from various countries such as the USA, Italy, Iran, Iraq, Malaysia from eminent institutions such as NTU Singapore, BITS, NSIT, NITs, IIIT, DTU, AMU, Symbiosis, PEC, Shiv Nadar University, Bennett University, MMMU, and so on. With the support of around 200 TPC members and after rigorous peer review, 77 papers were accepted for presentation in ICSC 2021 and presented in different technical sessions through online mode. Each of the papers was reviewed by at least two of the reviewers and at most 4 TPC members. There were a total of eighteen technical sessions covering different and all possible aspects of Wireless Communication Systems, Signal Processing for System Analysis, VLSI Technology and Embedded Systems, Machine Learning in Signal Processing, Internet of Things in Communication, Machine Learning in Communication, Image Processing, etc. Apart from these, 3 special sessions were conducted on Women in Engineering, Special Interest Group on Humanitarian Technology (SIGHT) and Young Professionals. Moreover, 8 Keynote speakers were invited to deliver their talk on the relevant topics to cope with the objectives of the conference. These keynote speakers were eminent professors in IITs and different reputed universities in the USA including the director of the IEEE Region 10 (Asia Pacific Region) and the chairman of the IEEE UP section.

# Journals

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- V. Khare and M. Singh, "Performance Analysis of Different classifiers for Tele-diagnosis of Parkinson's disease," Wireless Personal Communications, Aug. 2021.
- K. S. Singh, S. Kumar, and K. Nigam, "Design and Investigation of Dielectrically Modulated Dual-Material Gate-Oxide-Stack Double-Gate TFET for Label-Free Detection of Biomolecules," IEEE Transactions on Electron Devices, vol. 68, no. 11, pp. 5784–5791, Nov. 2021.
- M. Meenalakshmi, S. Chaturvedi, and V. K. Dwivedi, "Deep learning techniques for OFDM systems," IETE Journal of Research, Oct. 2021.
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- S. Kumari, V. R. Gupta, and S. Srivastava, "A Novel Feeding Technique for Folded Substrate Integrated Waveguide," AEU-International Journal of Electronics and Communications, 138(8):153852, Jun. 2021.

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- P. Rai and R. Kaushik, "Artificial Intelligence Based Optical Performance Monitoring," Journal of Optical Communications, 2021.
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- M. Jha, R. Gupta, and R. Saxena, "Cervical Cancer Risk Prediction Using XGboost Classifier," 2021 7th International Conference on Signal Processing and Communication (ICSC), pp. 133–136, Nov. 2021.
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- A. Kaul and J. Gupta, "Revolutionary 6G: Technologies, Architecture, Coverage, and Performance," IEEE ICCCNT 2021, IIT Kharagpur, Jul. 2021.
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- D. Dash, J. Saini, and A. K. Goyal, "Photonic Crystal Cavity Optimization Using AI," 2021 7th International Conference on Signal Processing and Communication (ICSC), pp. 111–113, Nov. 2021.
- A. Sood and R. Kaushik, "Performance Analysis of 20 Gbps-60 GHz OFDM-RoFSO Transmission with ODSB and OSSB Modulation Using Hybrid Mode," 2021 7th International Conference on Signal Processing and Communication (ICSC), pp. 85-90, Nov. 2021.
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- K. Singh and S. Kalra. "A Comprehensive Assessment of Current Trends in Negative Bias Temperature Instability (NBTI) Deterioration," 2021 7th International Conference on Signal Processing and Communication (ICSC), pp. 271–276, Nov. 2021.
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# **Book Chapters**

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S. No.	Event Name	Date
1	Introduction to Hub and present managing team Chief Guests: Mr. Ajit Tomar and Dr. Hema N.	18 October 2021
2	Autonomous Workshop (for volunteers)-Arduino	21-24 October 2021
3	Autonomous Workshop (First year)	27-31 October 2021
4	Exhibition	12 November 2021
5	Online LFR Team List Revealed for the First Year and Mentors are allocated	19 November 2021



# IEEE



S. No.	Event Name	Date	
1	Road Map to Success by Mr. Surya P. Kahar popularly known as "TechDose"	10 September 2021	
2	Orientation For First Year Students	29 September 2021	
3	IEEE Day Event TechHeist - Technical Quiz Event Creative Writing	02 October 2021	
4	Hacktoberfest Introductory session on Github	05 October 2021	
5	Webinar on Web dev. , MLH and Github by Praveen Kumar Purshotam	24 November 2021	
6	TechBlocks 7.1	25 - 29 November 2021	

# **ALUMNI SPEAK**



### MR. NARESH GOYAL

Batch - 2016

We spoke with Mr. Naresh Goyal, a 2016 graduate from Jaypee Institute of Information Technology. He is currently working as an R&D engineer with Synopsys, Inc.

In the insightful conversation, he gave us answers to the most sought out questions by all ECE students. He further commented on 'how to steer your way to a decent package', 'how the industry recruits freshers', and much more.

#### What is career scope in ECE? Are jobs scarce in ECE?

As freshers, most of us are unaware of how the industry works. However, the company would want to hire candidates with enough experience to be called industry-ready. In the initial struggle of one or two years, i.e., the training period, you should focus on gaining as much exposure in the industrial world as possible in your chosen field.

#### How to build a potential resume? How to decide on electives and projects?

Your current education in college will not make you industryready. It will be your company's job to train you. However, the employer still searches for students who have exposure to the industrial world. So, if you decide to do projects on industry-specific topics, it will be an additional perk.

For example, Verilog is one of the most used languages in the electronics industry, so working on projects in this language will be beneficial.

Talking about electives, the employers do not focus on what subjects you have studied; they only look at your CGPA and check if it fits in their eligibility criteria or not. Thereby, choosing electives becomes a personal choice.

Focus on building your basic concepts. Genuinely speaking, again, the industry will not use any of your current education in its raw form. Whatever you are studying right now will strengthen your fundamental knowledge in Electronics.

#### How to be prepared for interviews? How to deal with the anxiety during an interview? How to deal with rejections?

Besides technical skills, employers will judge you based on your aptitude, problem-solving, and decision-making skills. They will assess you based on your overall personality. So make sure you have worked on your communication skills and other related skills. Also, have a good hold on the basic concepts. Before you step inside the room, you should be well prepared. Research about the company and the post you are applying for.

Smartly structure your resume, highlighting the specific skill set that that particular firm requires. Even after attending 40-50 interviews now, I still tend to be tensed every time I enter an interview room. So, it is natural to feel the anxiety.

But there will be times when you would give your best and still get rejected.

Do not get discouraged if you get rejected. Learn from rejections. Every experience will teach you something. Count on your strengths and weaknesses and come back as a better version of yourself in the coming interview.

#### What was the favorite moment of your college life?

I cannot just name only one moment! There are so many. College life is indeed the golden part of your life. I miss my buddies and our hangout spots. Sometimes, when I look back and realize that part of my life will never come again, I feel nostalgia. In college, you will unlock several beautiful memories. Cherish every moment!

I would share one of my funniest moments. As a fresher, when it was my first day at the campus, a group of seniors called me and asked me to greet them. At that time, I was focused on 'campus' and was clueless about their comments. So, befuddled and absent-minded I replied, "Happy Birthday!".

#### Is pursuing a master's programme after a B.Tech. degree a good decision? Do students with a master's degree have an advantage over those who do not?

Broadly, the industry offers technical and marketing opportunities. If you wish to detour from technical stuff, you can pursue an MBA and reach out for marketing vacancies.

At the same time, if you are considering pursuing M.Tech., try to do it from a recognized institute.

M.Tech. students get chosen over B. Tech. students mainly because they acquire additional experience and hence are better positioned for the industry. But, it does not guarantee an M.Tech. student a job. The struggle is omnipresent.

#### Should scoring a high CGPA be our goal?

College is not only about scoring good marks/CGPA. It is about networking, interacting, honing your communication skills, gaining knowledge, shaping your personality with CGPA like an addon.

So, if it is good, somewhere or the other one gets an extra advantage. Maintaining a decent CGPA will be equivalent to playing safe.

#### Is working in the corporate sector stressful?

Stress and anxiety are everywhere. It does not matter if you are in a 9 to 5 job or not. You see, this question can have countless different answers.

Being unhappy or feeling excessively under pressure depends on the individual psychology of an employee and other factors like the work culture of a company.

In the beginning, you could feel it is all quite hectic, but once you get adapted and have gained enough exposure, you will get comfortable with all the workload. Have a positive outlook on all things related to your job. And obviously, earning is not easy.

#### How important is networking during college life?

Your message

to all readers

of Udbhaas?

Every single person you will meet will have something to offer you; learn from them. Also, LinkedIn is a remarkable platform. Connect with different people. Do not be hesitant to engage in small talks. Networking will gift you confidence.

> Do not ever give up. There will be moments when you will get rejected and even criticized, do not take them personally. Just reflect and work on yourself.

> Jaypee would give you good exposure. Use it to build your personality and brush up your confidence. Make friends and create memories.

Be curious. Be open.

Muskan Gupta

Mr. Naresh Goyal



# Life as an ECE Student

#### Abhaya Goel, Second Year

Being an online student for two whole semesters had made our batch miss so many opportunities. I even started a 'resin art' small-scale business during the pandemic break. And now that it is offline, it's hard to manage my education and my small business together. But as every day passes by, I am growing and evolving. At the end of each day, I learn and discover new things. Gradually, I am heading towards my goal. And all of this is so fun to do.



#### Kritika Singh, Third Year

Since we entered the college GATES, Life has been extremely busy OR tumultuous AND happening! Life as an ECE student is never steady. It is a spectrum of emotional and exciting waves.



#### Adwitiya Shukla, Second Year

The life of an ECE student is analogous to the values of a truth table; 0 or 1, full of ups and downs. Ironically, your life will become messy, just like the disordered connecting wires on the breadboard while performing experiments in the lab. But in the end, all your efforts will be worth it and you will glow like an LED.



#### **Digvijay Singh, Third Year**

My life as an ECE student has been pretty amazing. Engineering for me was all about exploring every little thing out there in the world. From composing music, being the Captain of the Indian Under 19 hockey team to representing my State for 10M Air Pistol Shooting in the upcoming Nationals, I have always been in love with this little journey.



# Life as an ECE Student



#### Sri Sudhan Velu, Second Year

I am so grateful that finally, we are attending classes in the offline mode. This is the true engineering life I signed up for. I had lost the zeal of new beginnings during my first year, the pandemic year. Well, now the lost enthusiasm seems to be coming back. But I kept myself busy shooting martial arts videos and uploading them on my Instagram page: the\_martialspirit. It helped me strengthen my physical and mental health, preparing me to adapt to the sudden changes in my academics and social life.



#### Abhilasha Goel, Third Year

0.5+2.5i describes 2019 batchmates and my college life so far, I hope the coming year adds itself in the real part :) Engineering in electronics was Hobson's choice! You just need to keep going and that's the beauty of it. The online semesters gave us the freedom to take studies with a minimalistic approach. I am sure this will be missed!



#### Shrey Tyagi, Second Year

I started my offline college life in my 2nd year. Because of Covid, the students from the 2020 batch weren't exposed to the social part of college life. Now, interacting with people helps us develop our soft skills and in the process, we learn to embrace our individuality. The best part of our college is the LRC, equipped with good personnel and books, a great place to spend healthy time learning.



#### **Anmol Arora, Third Year**

It is incomprehensible how much a curriculum such as engineering can teach us. You may not be attached to your branch, yet you can't help but find the beauty in everything related to it. Learning to organize life without a proper structure and with the least amount of self-centeredness and maximum amount of discipline. These four years prepare us for the more challenging stages of our life ahead.



# Life as an ECE Student



#### **Bhavya Wig, Second Year**

College life is a mixture of planned stuff going unplanned. It trains us on how to control emotions and manage our time. It might seem exasperating with the increased responsibilities and burden. I still feel that it is a must for every teenager to live as a hosteller during their college. It teaches tons of lessons.



#### Siddharth Varshney, First Year

Amidst online classes, assignments, and examinations, at this moment, I miss the extra-curricular activities the most. All I wish for is for classes to start offline again.



#### **Atishay Jain, Second Year**

With great teachers, helpful seniors, amazing friends, exciting hub activities, college life is going well. It isn't easy but every experience teaches me something. Hoping for the best to come in the future.



#### Saksham Varshney, First Year

ECE is the most flexible branch in Engineering in terms of choosing between Core jobs and IT jobs. But I have aimed to get placed in a core electronics job. That's why I am preparing myself in the following:

C; VHDL or Verilog; MATLAB and PLC. The process of learning and exploring is fun!

# Penned by the Faculty Members

~डॉ. सौरभ चतुर्वेदी (उजाले ज़िन्दगी के, 2016)

 रोके सभी को ख़ुद न रुके कभी समयचक्र ।

सात हाइकु

- तोड़ लो खूब पत्ती-टहनी-डाली जड़ें हैं बाक़ी ।
- उत्सुक नदी खड़ा बाँहें फैलाए प्यासा सागर ।
- सपनों का क्या मोहताज नहीं हैं बन्द आँखों के ।
- 5. गूँजती रही सन्नाटे की आवाज़ अन्तर्मन में ।
- मुश्क़िल बड़ी जीवन की पहेली न बूझे कभी ।
- बहुत बली मन की खलबली बरसों पली ।

### MYTH OR HISTORY

### ~MR. ATUL KUMAR SRIVASTAVA

Our cultural practices and beliefs have always been questioned, whether they are myth or real. Europeans have always interpreted the word "history" with different meanings. This text is not against any belief but in support of one's own belief. There has been historic evidence that prevailed for many decades in the intellectual society of our time, but corrections are now being made with astronomical, geological, and hydrological proofs. This text only aims to create an interest in young minds to explore themselves and to withhold it.

India is such a country whose culture and beliefs have existed; even after the eruption of Indonesia's massive Toba volcano, dating way back to 74000 BC, when the earth entered into an ice age and very few habitats were left globally. It is scientifically proven that by the time the ice age got over, the races settled near the equator or the tip of the peninsular region of India and started wandering throughout the northern hemisphere. They spread to the western world, the Middle East, China and the eastern subcontinent.

In the modern world, claims on the occurrence of any prehistoric event, such as Lord Ram's exile and coronation, or the Mahabharat's actual date of occurrence are now proven to be true because our saints, such as Valmiki and Vyas, describe all the events occurring related to astronomical evidence so well that time can be calibrated precisely on the basis of this testimony. Sometimes astronomical evidence lacks a time upper bound. For this reason, geological evidence is also important. A very important geological change that happened and is mentioned in literature is the disappearance of the river Sarasvati. The change in the flow direction of a river, such as the Sutlej, also helped to constrain the time of event occurrence. According to the Valmiki Ramayan, when Lord Ram sought the help of Sugreev in searching for Sita, Sugreev sent his army in all four directions and elaborated on the type of geographical habitat in each direction. It is really surprising to know that such an illustration is not possible unless someone has seen those places from the Andes to the Alps. So the same question was raised before Sugreev also. Sugreev explained that as he was sent to exile by his brother Bali, he was wandering all those places globally for the safety of his life.

There is also a lot of interesting literature available regarding the invasion of Aryans and the pushing of the natives of the Indo-Gangetic plain to the south. That has also been proven wrong. Again, with evidence that the movement of such races was not from outside India but the reverse of that from India to western Asia and central Asia. Different findings give different dates of settlement, but all now accept that it was the other way round. India was not only connected to the western world by land routes, but also by sea routes to countries in Arabia and Southeast Asia. India possessed the most prosperous trade routes, both from the sea and from the north, popularly known as the silk route.

We are celebrating "Azadi Ka Amrit Mahotsav" this millennium. India has witnessed many millennia of glory, which we hope will continue in the future. Finally, some glimpses of history are mentioned here. It is in the hands of the coming generation to uphold and keep exploring the rich culture that we all carry in our genes.

# WHICH IS BETTER: ONLINE, OFFLINE, OR HYBRID EDUCATION?

~DR. SHRUTI KALRA

Online education is seen as a game-changer in education. Assisting in both the continuation of education and the introduction of new ideas and advancements into the field throughout the COVID-19 period has also helped improve education in rural and remote sections of the nation, among other achievements. Affordability and convenience are other benefits that speed up adoption. Several industry professionals have begun suggesting that offline education may be completely replaced by online education due to the rapid growth of online education over the last 18 months.

While internet education did help to keep the school going during the lockdown, most would agree that education is much more than just textbooks and classroom lectures. Individuals must be educated holistically. Online education offers a technological basis, cutting-edge technologies, quality, affordability, convenience, and reach. But it's cold and impersonal. Students engage with classmates and support staff, as well as with instructors. Developing soft skills is crucial to developing a person's whole personality. Students learn discipline, teamwork, public speaking, gender sensitivity, and empathy throughout their school careers. Nobody can mature without these skills. Sensitive children with special needs may find it difficult to learn online.

Isolation caused by online education has also been reported and studied. As children grow older, they need to develop soft skills and interpersonal abilities that online education cannot provide. Stage fright and other bodily changes that occur in a non-online school help mould a child's personality.

Online education is crucial in maintaining education, as evidenced by the COVID-19 epidemic, which required consecutive lockdowns. Online education is supplying some oil to the overall education motor. But online schooling is not without peril. Technology interruptions and cybercrime are always a risk to everything linked to the internet. Therefore, solely online education would be harmful. Online education should always be accessible.

While online education has many benefits, it cannot fully replace traditional education. For the educational system to be successful, both online and offline education must coexist. Rather than competing, they should complement each other. The education sector must find a balance between the two.

Online and offline education may coexist in many ways. Institutions of higher learning may combine online and offline education within regular classroom sessions. Some subjects can be taught in a traditional classroom, while others can be taught online. Less time is spent at school and more time is spent at home. Children may be taught offline first, then online as they get older. Through early soft skills development and progressive introduction to technology without overwhelming kids, offline education helps students build their identities and characters.

Online and traditional education both have pros and cons. Offline education has existed for thousands of years. It has been largely successful in educating and developing students. Online education has given the education industry new development prospects. It has increased interest, made education more accessible, and removed time and distance barriers. Modern technology has improved efficiency and is now part of the educational environment. It can't replace conventional education, though. For the global expansion of human resources, many forces must work together, both online and offline. Together, online and conventional education will help the education business soar.

# Penned by the Students

### MOUNTAINS AND GLEAMING STARS

Memories made in the mountains stay in our hearts forever.

The stars you look up to reflect what's within you. Experiences are not what happens to you, it's what you do with what happens to you! I went to Sikkim last year and my hotel room was approximately 1700m above sea level and I was able to see the entire Gangtok. It was absolutely mesmerizing and I couldn't stop myself from writing this piece. This is what I wrote:

The skies don't have any stars, Nonetheless, the lights on the rooftops make me wanna stargaze; A black sky with white stars all around, Kygo and avicii's music surrounds. The twinkling of the stars Refuses my eyes from blinking. These enigmatic heavenly bodies, Aligned in various constellations, Drafting the message of newfound hope. The valleys of these craggy mountains are the sign, life's difficult but not impossible. Not every time when you look in the twilight can be hair raising, All inner beauties are hidden and demand praising. I can describe these majestic mountains the whole night, Thinking what it would be without these after lights.

These stars are calling me and i must go, To an unknown destination where love is high and loathing is low.

Ananya Shanker B.Tech. Programme First Year

### PURSUIT

Every day in the morning we are awake, We move our laziness aside for reality's sake, There is a dream which into reality we have to make, Many think doing that is a piece of cake, They don't realize, that cake we ourselves have to bake, Help comes in name of family and friends, But some bonds are fake, In this reality some people want their wealth to be thrust, While some have drowned in lust, Some think immense power is a must, Some are driven by hatred & their homicide intent is unjust, Some possess a superiority complex & look at others with disgust, Some people are broken and paranoia because of distrust, Some people face unfairness & poverty that's just, Too hard to watch but we have to watch & we must!

> A girl standing in pitch darkness, Her bright aura symbolizing her godliness, Tear in her eyes symbolizing her hopelessness, Her lips are dry symbolizing her emptiness, She is carrying a torch symbolizing she is fearless, To face the truth that her children are helpless

All they see is darkness, All they hear is darkness, All they feel is darkness, All they touch is darkness, All they smell is darkness, All the sense is darkness, All they have in their heart is darkness, What they pursue is darkness, Thinking its the pursuit of happiness, But it never stops its endless, People's darkness can be cured by her torch's light, But people going near her torch I see seldom, That torch is nothing but wisdom, The thought to never leave the pursuit is like venom, From which one should seek freedom, Her lips moved and her words reached me lowly, As she spoke despair came into her eyes slowly, Put a gun against my head cock it and shoot, But once & for all stop this pursuit

> Aryan Sharma B.Tech. Programme Second Year

## A SUBTLE REALISATION -TAKE ME BACK IN TIME

Take me back in time, where my dreams are only mine Make me who I was, The spring flower of the winters Playing silly games, take me where I came from Where the sunshine made me jump, and the rain made me dance

Make me think the way I did!

Where the grass was green, and the water blue Take me back to the place I called home, Where the sound of duster and roaring laughter echoed, let me paint the canvas again, The messy kind, just the way I like it to be Take me back to the time, When "Home-Work" was the only thing to worry about

Did I just make friends, with a fake smile on?

How I laugh now the way I whined, if only I knew the beauty of it all, let me tie those braids again I really ponder once I found myself painting, My lips pink and the eyes black take me back in time, to the land of trial and error Take me to the people I know, The kind ones, who only carry a face of their own

And never bring me back again!

Pritpal Singh B.Tech. Programme First Year



कमज़ोरियाँ न गिन तू बन्दे अपनी, देख कितनी खूबियां छिपी हैं तुझमें तू राहों में ठोकरों की फ़िक्र न कर, हौसलों से पा ले तू मंज़िल अपनी ।

सपने तेरे, ज़िन्दा हैं अब तक तुझमें, ताबीर कर ले हर ख़्वाब की ख़्वाहिश तू अपनी रोकती है जो तुझे तक़दीर का मारा बताकर, कर दे फ़ना उस खौफ़ को अब दिल से अपनी ।

हार का मलाल अब न रख जारी, जीत के गुलाल से रंग दे तू ज़िन्दगी अपनी, खामोशियों के शोर से बाहर निकल, लेकर मशाल हाथ में कर खोज अपनी ।

विकर्ष जैन बी. टेक. प्रोग्राम द्वितीय वर्ष

# PERSONALITY, YOUR SUPERPOWER

There are a lot of problems out there in the world. Some are related to us, some are not. Some problems become a part of us, others we forget. In the end, what matters is the sanity of mind. Peacefulness in mind is the extreme superpower one can possess. So it is really important for us to understand our mind, our thought process, opinions and beliefs because collectively they form our personality. Your family, your day, your work, your thoughts, your friends, your approach towards life, and YOU totally revolve around what personality type you are.

So, What is personality?

It is the term we use frequently in day-to-day life. If you ask somebody about what personality is, chances are, they feel that they have a really good idea about it. But when it comes to describing it in a lot of detail, they might struggle.

So, starting with a textbook definition, in psychology, it is described as "A relatively enduring pattern of thoughts, feelings, and behaviour that are consistent across time and give individuality to a person."

Personality involves characteristics, that basically describes what somebody's like.

For example: This person is funny, outgoing, friendly, reliable, dependable, shy, or this person is always very happy. These are all different ways of describing somebody and this can be thought of as personality but it does not just encompass the different types of behaviours (although it is a big part of the personality too). It also involves the way people think about things, so do they enjoy thinking more abstractly, or do they prefer things to kind of remain consistent or do they prioritize their work over anything. It also involves emotions, like who has a positive approach towards life, an anxious or a negative person. Personality encompasses all these types of traits and many more, in fact.

In layman's terms, personality is the sum of all the things that you are. Here come the big five personality traits, also known as ocean traits, which

are directly responsible for whatever importance personality holds.

### Cont.

So here it goes:

1) Openness to experience:

Openness to experience describes people who have high intellectual curiosity and high creative imagination.

### 2) Conscientiousness:

Personally, I feel this is one of the most interesting and important traits amongst the five. Conscientious people pay more attention to the details, more attention to organizing daily activities.

#### 3) Extraversion:

This trait is characterized by sociability, talkativeness, assertiveness, expressiveness. People having this trait keeps the environment energized and excited in their vicinity. Extroverts tend to be happier, it's obvious because socializing, partying provide them with tons of friends. So the probability of a person being happy makes sense.

#### 4) Agreeableness:

This trait gives an optimistic view of human nature. This trait is an advantage for building relationships as well as better career outcomes.

#### 5) Neuroticism:

This trait is defined as a tendency towards anxiety, depression, self-doubt and all sorts of negative feelings.

People experience the world as distress, threatening, and unsafe. This trait has a great negative influence on one's career. Research has shown, neuroticism is more common in youths.

> Akshat Srivastava B.Tech. Programme Second Year

## **TEEN DEPRESSION AND SUICIDE**

The world's top 10 issues include teen depression and suicide. We all are familiar with it. We all are aware of it. We hear about it in our routine lives; we see it in our day-to-day lives. But are we able to understand it?

In India, mental illnesses are hushed. Speaking about your mental state openly is considered taboo. Consulting a professional is looked down on. A person will be treated with much more equity and care if they have cancer rather than depression.

Yes, we are now more accepting of the concept of depression among teenagers. But we still accept the notion of it, not its existence. It still seems unnatural to us when someone close indicates their suicidal tendencies. We renounce it as an overdramatization of sadness, and sadly, even as attentionseeking. We can not believe that our classmate, friend, sibling, child or that random girl on the bus, who used to beam good morning to you, might be suffering.

Sure, for a healthy person, with no training, it is impossible to know the demons the mind harbours. Nobody demands that out of us. The only thing required is to understand that we can not comprehend the magnitude of the circumstance. Not everything is going to be alright if we tell them to smile. Or if we say to them to grow up or move on.

Another significant factor concerning people suffering from depression is that we continue to see them as fragile and varied. They are constantly being associated with their illness and not what they are apart from it. They are not their illness; they are so much more than that. And they are beautiful as they are.

We all must have heard or read this somewhere; sadness is not depression. What we need to know now is that depression is not only sadness. It is a culmination of all the negativities which engulfs a person every day. Negligence will not work, help is the solution. Seeking help is not only consulting a mental health professional. There are a variety of treatments available. Something or the other will work; you have to help in finding what will.

This world needs a liberal, understanding and accommodating mindset. We need to shed away our previous prejudices and baseless stereotypes. We need to be kind to others as well as to ourselves. Let's extend our support to people who are in need. You might save someone's life!

Mehak Gupta B.Tech. Programme First Year

# **Achievements of Students**

केन्द्रीय विद्यालय संगठन-नई दिल्ली ४७ थी राष्ट्रीय खेल-कूर प्रतियोगिता (बालिका)		regrester int the is	KVENINGIE 0003 ALAYA SANGATHAN-NE L SPORTS MEET (	W DELHI
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Che	Jen ten	-	Strand (	-

Poonam Kunhi Bora B.Tech. Programme Second Year

I am delighted to share that I and my team secured the gold in the 47th KVS Table-Tennis National Sports Meet-2016. I am so grateful for it.

 International Astronomical Search Collaboration	
Suryansb Saxena SpACE Ceam Apophis In recognition of valuable contributions to observations of near-Earth objects and Main Belt asteroids by participating in the analysis of images from Pan-STARRS.	Sur B.Te S
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Suryansh Saxena B.Tech. Programme Second Year

Ever since I was a child, I had always been attracted to Astrophysics, Stars, Galaxies, Planets, and Black holes. Eventually, I decided to work and develop on the same on a professional platform.

I set out to become a member of the AAVSO, the world's largest variable star organization. I worked on a collaborative project with Laser Interferometer Gravitational-Wave Observatory (LIGO), Hanford, to research gravitational waves and their occurrence by coalescence of black holes.

Later, I was invited as a guest speaker to deliver a lecture on my research work in a collaborative session conducted by Project Astrophile and the University of Santo Tomas, Philippines. In addition, I have named six asteroids in a citizen science program, International Astronomical Search Collaboration, in association with NASA.

Throughout the journey, I never did and never will- give up on faith. "Faith on myself and Faith in the Universe." If you have a dream, become crazy about it!

# Achievements of Students





Janhavi Joshi got published in lockdown with her first book "Jeevan Sootra", available on all leading online stores like Amazon and Flipkart. The pandemic started the influx of negativity, hopelessness, and the pain of separation, with other heavy emotions, it was getting hard to maintain one's inner peace. Amid all these difficulties, a young budding writer, Jahanvi Joshi, a fourth-year B.Tech student from our college Jaypee Institute of Information and Technology, through her first book "Jeevan Sootra", took an important step to light up the falling world by rising like the sun in the sky of the literary world. Jeevan Sootra is an inspirational self-help book that is a compilation of fifty articles and poems written on topics like death, love, transformation, nature, inspiration, spirituality, supernatural and transcendentalism of life, along with a wonderful perception of how to lead a life with no regrets, and positivity. Jahanvi gives a new optimistic outlook to every subject written in it. The book promises about 'hope'. Apart from this, Janhavi is also a trained Kathak dancer and has actively participated in various events throughout her college years. She is also associated with an NGO 'Wonders India' and has been an active volunteer in various social welfare works. Janhavi Joshi and her book, have been successful in inspiring, not only the youth but every section of society. The book is available on Flipkart, Amazon, and Notion Press as paperback and Kindle editions.

> Janhavi Joshi B.Tech. Programme Fourth Year

Aditya Srivastava got published in lockdown with his first book Tainted Maples, as a co-author and later he worked on and got his 3 more books published that are available on leading stores like Amazon. It was very unlikely to start a company but Aditya managed to start his own startup named Named "Felecia Words Publication House" along with his team of wonderful delegates who take it as their end goal to find every budding talent and handcraft them to being the future of writers. Along with publishing books, his company also organizes different events online and offline. Being a 21-year-old second year student of Jaypee Institute of Information Technology, he managed to give jobs to more than 25 people which made him successful as an entrepreneur. Talking about his writing, he has worked as a coauthor in more than 100 books, his writings reflect the different stages of love, heartbreak & many more feelings that a teenager feels during his evolution from a teen to a man.

He is also associated with many standup comedians and has worked along with them in many shows like Zakir Khan Show in Technex'20 at IIT BHU Varanasi, etc.

Aditya's Life goal is to become a sensational scientist to find out the things that fascinated him during his teenage times, thus he aims to get into ISRO after his graduation and post graduation are done.

Aditya's Books are really connecting to the teenagers and hope anyone who reads it would connect to them.

> Aditya Srivastava B.Tech. Programme Second Year

ॐ विश्वानि देव सवितर्दुरितानि परा सुव । यद् भद्रं तन्न आ सुव ॥

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