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NEWSLETTER

IIT Delhi Visit



Khwopa Engineering College faculty members visit to the robotics laboratory of IIT Delhi.

28th Poush

Khwopa Engineering College's faculty members recently paid a visit to the Indian Institute of Technology (IIT) Delhi to explore potential collaborations and exchange opportunities. The delegation led by Prof PN Maskey and Principal Assoc. Prof S Maka, Prof. CK Kawan, Assoc. Prof M Shakya and Senior Lecturer SM Bijukchhen visited the rock mechanics lab, structural dynamics lab, robotics lab, classrooms, and library at IIT Delhi.

During their visit, the delegation met with Dean of International Programmes Prof. N Garg, Prof. AK Jain, Prof. KS Rao and Prof. Jha from Department of Civil Engineering, and MD of Foundation for Innovation and Technology Transfer Dr. A Wali at IIT Delhi. Discussions centred on the possibility of a Memorandum

of Understanding (MoU) between the two institutes for research, academic collaboration, faculty and student exchange.

The visit was a great opportunity for Khwopa Engineering College to learn more about the research and innovation taking place at IIT Delhi and explore ways in which the two institutes can work together to further scientific and technological advancements. It is also a step forward in the direction of promoting international academic collaborations and increasing the international exposure of Khwopa Engineering College.

The delegation had an optimistic outlook towards the future of collaborations between the two institutes and is looking forward to further discussions and negotiations to finalize the MoU between the two institutes. The delegation will visit IIT Roorkee next.



Fieldwork of MEQ First Semester Students

11th Poush

First semester MEQ students completed a series of fieldwork expeditions in Engineering Seismology on Poush 11th and 12th, gaining valuable hands-on experience in the field of geology and seismology.

The first site visited was Sir Khola in Mohattari, where the fault responsible for the 1934 Nepal Bihar Earthquake is exposed on the surface. The students had the opportunity to study the geology of the area and learn about the science of earthquakes and their effects on the earth's surface.

They also visited the seismic station of National Earthquake Monitoring and Research Centre (NEMRC) at Bardibaas, where they

were able to observe the working of a seismic station and technology used in earthquake monitoring.

They visited Kurtha and Janakpurdham railway stations in Dhanusa and learned about the structure of the station building and the inner workings of the railway system.

Overall, the fieldwork expeditions provided the students with an opportunity to apply the theoretical knowledge in a real-world setting and gaining a deeper understanding of engineering seismology. Senior Lecturer Subeg Man Bijukchhen and seismologist of NEMRC Chintan Timsina led the fieldwork as instructors.



Guest lectures on “Social Institution and Neighborhood Planning” and “Kathmandu Green Corridor”

15th Poush

Post Graduate Department of Urban Design and Conservation, Khwopa Engineering College, organized guest lectures on “Social Institution and Neighborhood Planning” and “Kathmandu Green Corridor”. The lectures were delivered by Ar. Sujan Das Shrestha and Ar. Shreejana Thapa on 12th Poush 2079.

On 15th Poush 2079, Post Graduate Department of Urban Design and Conservation, Khwopa Engineering College, conducted guest lecture on the topic “Urban Form as the Geometry of Socio Spatial Continuum”. The lecture was delivered by Prof. Dr Bharat Sharma.



Guest Lecture on “Space Debris Monitoring from Nepal”

25th Poush

A guest lecture on “Space Debris Monitoring from Nepal” was organized by the Department of Electronics Communication and Automation Engineering of Khwopa Engineering College on January 9, 2023. Dr. Paolo Marzioli was guest lecturer. He is a Research Associate in Aerospace Systems at University of Sapienza Rome, Italy and his main research topics include Nano-satellite and aerospace payloads tracking and navigation systems; Nano-satellites design and integration and Aeronautical radio-navigation systems.

The lecture was concentrated on Space Debris which can be defined as “All man-made objects including fragments and elements thereof, in Earth orbit or re-entering the atmosphere, that are nonfunctional.”. The possible

collaboration path between the researcher, academic institute and students were also discussed in the event.

In the meantime, Dr. Abhas Maskey also had a brief interaction with students. He has been directly involved in seven different satellite (CubeSat) projects placing seven satellites in orbit. This also involves building and launching first satellite of Nepal, NepaliSat-1.

The students from second semester of the Electronics, Communication and Automation Engineering Department and Computer Engineering Department actively took part in the lecture. Head of Computer Engineering Department Er. Bikash Chawal gave vote of thanks to the guests, and Head of Electronics Communication and Automation Engineering Department Er. Yogesh Bajracharya handed over the token of love to the presenter.



from book review program... "Deep Work"

"Deep Work" is a book written by Cal Newport that explains the importance of cultivating a skill he calls "deep work" in today's increasingly distracting and fast-paced world. According to Newport, deep work is the ability to focus without distraction on a cognitively demanding task and produce high-quality work as a result. It requires both the ability to eliminate distractions and the discipline to stay focused on the task at hand.

Newport argues that the ability to do deep work is becoming increasingly valuable in today's economy, as it allows individuals to produce valuable output in less time and stand out in their fields. In contrast, he argues that shallow work, which is the kind of work that can be easily done in fragments or while multitasking, is becoming less valuable as it can easily be outsourced or automated.

The book is divided into two main sections. The first part discusses the importance of deep work and why it is becoming increasingly valuable in today's economy. Newport argues that as the world becomes more connected and technology continues to advance, the demand for deep work will only increase. He also explains that deep work can lead to a sense of fulfillment and meaning in one's work, as it allows individuals to produce high-quality work and make a meaningful contribution to their fields.

The second part of the book focuses on how to cultivate the skill of deep work. Newport offers a number of strategies for eliminating distractions and staying focused, including setting clear goals, creating a ritual to get into a deep work state, and setting aside dedicated blocks of time for deep work. He also emphasizes the importance of creating a dedicated workspace that is conducive to deep work, as well as the importance of managing one's energy levels and avoiding burnout. One of the key strategies Newport recommends for cultivating deep work is to set clear goals and priorities. He

argues that it is important to have a clear understanding of what one is trying to accomplish, as this helps to eliminate distractions and stay focused on the task at hand. He also recommends setting aside dedicated blocks of time for deep work, as this allows individuals to fully immerse themselves in their tasks and produce high-quality work.

Another key strategy that Newport recommends is the creation of a deep work ritual. This involves establishing a specific set of steps that one follows every time they enter a deep work state. For example, this might involve setting up one's workspace in a specific way, turning off all distractions, and setting a clear goal for the work session. By following a ritual every time they enter a deep work state, individuals can more easily get into the right mindset and stay focused on their tasks.

Finally, Newport emphasizes the importance of managing one's energy levels and avoiding burnout. He recommends setting aside time for rest and relaxation, as well as taking regular breaks to recharge and refocus. He also advises individuals to be mindful of their work habits and to avoid overworking themselves.

In summary, "Deep Work" is a book that discusses the importance of cultivating the skill of deep work in today's economy. Newport argues that the ability to focus without distraction on a cognitively demanding task is becoming increasingly valuable, as it allows individuals to produce high-quality work and stand out in their fields. He offers a number of strategies for cultivating deep work, including setting clear goals and priorities, creating a deep work ritual, and managing one's energy levels to avoid burnout. By following these strategies, individuals can improve their productivity and achieve greater success in their work.

from book review program... "Thinking fast and slow, by Daniel Kahneman"

Thinking fast and slow is a best-selling book on behavioural science and economics by Nobel laureate, Daniel Kahneman, who's work on economy led to Nobel memorial prize in Economic sciences. Kahneman also worked with Israel defence forces and several departments and collaborator, which have contributed to his research. The book summarizes research that Kahneman conducted over decades, often in collaboration with Amos Tversky.

The main thesis of the book is a dichotomy between two model of thoughts i.e. "system 1" which is fast, automatic, unconscious, instinctive and emotional, "System 2" which is slower, deliberative, conscious, calculating and logical. System 1 continuously generates suggestion for system 2: impressions, intuitions, intentions, and feelings. If endorsed by system 2, impressions and intuitions turn into beliefs, and impulses turns into voluntary actions. Usually, system 2 adopts the system 1's suggestion with little or no modification, and you generally believe your impressions and act on your desires. System 2 does the continuous monitoring of your own behaviour. The control that keeps you polite when you are angry or alert when driving at night. System 2's task is to overcome the impulses of the system 1 and it is in-charge of self-control.

Kahneman introduced the concept "What You See Is All There Is"(WYSIATI). This theory states that when the mind makes decisions, it deals primarily with Known Known's, phenomena it has observed already. It rarely considers Known Unknowns, phenomena that it knows to be relevant but about which it does not have information.

System 1 is generally very good at what it does; it's model of familiar situation are accurate, it's short-term predictions are usually also accurate and its initial challenges are swift and generally appropriate. System 1 has biases, however, systematic errors that it is prone to make in specified circumstances. It answers easier questions than the one is asked, and it has little understanding of logic and statistics.

For examples:

Complete the phrase "war and ..."

Solve $2+2=?$

Display disgust when seeing a gruesome image

Understand simple sentences

Whereas, system two is better at:

Prepare yourself for the start of a sprint

Direct your attention towards someone at a loud party

Park into a tight parking space

Solve 17×24

Kahneman explains different cognitive biases and heuristics with number of experiments.

Basic introductions to some of my favorites from all chapters are anchoring effect, availability heuristic, optimistic bias, and regress to the mean.

Anchoring effect

if provided with greater/lesser numbers, participants gave greater/lesser responses. when asked whether Gandhi was more than 114 years old when he died, most participant provided a much greater estimate of his age at death than others who were asked whether Gandhi was more or less than 35 years old. Experiments show that people's behaviour is influenced, much more than they are aware, by irrelevant information.

Availability heuristic

The availability heuristic is based on the notion that, "if you can remember it, it must be important." Because of the coincidence of two planes crashing last month, she now prefers to take the train. That's silly. The risk hasn't really changed; it is an availability bias. The easier it is to recall the consequences of something, the greater we perceive these consequences to be. Sometimes, this heuristic is beneficial, but the frequencies at which events come to mind are usually not accurate representations of the probabilities of such events in real life.

Optimistic bias

Optimism is sometimes beneficial, and sometimes be damaging, Kahneman writes it as, "the most significant of the cognitive biases." it generates the illusion of control: the illusion that we have substantial control of our lives. The planning fallacy is the one of the optimistic bias to overestimate benefits and underestimate costs, impelling people to begin risky projects.

Regression to the mean

Regression to the mean is a common statistical phenomenon that can mislead us when we observe the world. If a golfer did extraordinary, he will do average the next day. if a company is extraordinarily successful, it might do average next year. Kahneman advices to regress to the mean, and look for base rates

I encourage you to read the book, and his works which I didn't include here such as prospect theory, the notable work of Kahneman and Tversky, on which he landed Nobel Prize.

Kahneman shows how we always try to make sense of the world around us. The coherent world is much simpler, and lot less messy than it really is. The book is full of fun experiments and questions such as: A bat and a ball cost \$1.10. The bat costs 1 dollar more than the balls, how much does the ball costs? making the readers giggle and engage their system 2.

-Prasamsa Pokharel

Khwopa Quiz Contest-2079 Khwopa Quiz Contest-2079

29th Poush

Khwopa Engineering College, with the initiation of its Science and Humanities Department, organized Quiz Contest (an integral part of extra-curricular activities) to its students of second semester of all programs on 29/09/2079 in college premises. There were 5 teams in total, each team consisting of 3 members, who participated in the final contest. The teams were formed through internal selection procedure in each academic program (class). The contest was accomplished in the presence of Er. Rabindra Phoju, the Acting Principal of the college, Heads of departments and sections, faculty members and students of second semester. The program was run by Mr. Naba Raj Budhathoki, Head of Science and Humanities Department.

Er. Phoju encourage students to be more active in extracurricular activities organized by the

college in his conclusive remarks on the program and distributed the prizes and certificates to the winners as well as participants.

Team of Rajip Tuitui, Niharika Sah and Subekshya Kadel (BE Computer) secured first position where as team of Sudha Chhimal, Sushil Dhakal and Mohit Shrestha (BE Electronics Communication & Automation) and team of Anish Khadka, Kamal Adhikari and Dandi Raj Dahal (BE Civil – AB) secured second and third position respectively. Similarly, team of Pradip Pokhrel, Roshan Budha and Sameer Koju (BE Civil – CD) and team of Aditya Shah, Dipesh Bhattarai and Asmita Kasti (B. Architecture) secured fourth and fifth position respectively in the competition.



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