

NEWS CLIPS

July 21-27, 2018

Highlight of the Week@IITD

Institute Of Eminence: IIT Delhi has a new proposal for their alumni to help research scholars

July 24, 2018 https://www.thelivemirror.com/institute-eminence-iit-delhi-new-proposal-alumni-help-research-scholars/



IIT Delhi which was recently conferred the status of 'Institute Of Eminence' has an unique proposal for the alumni to help out students who take up research or social work. The IIT Delhi has approached its alumni to donate and will parts of their inheritance to the institution. They have also asked the alumni to name them as beneficiaries in their insurance policies.

Sanjeev Sanghi, dean of alumni affairs, said on Monday that a United States-based alumnus has promised to leave his alma mater \$1 million in his will. Another, a 1967 graduate, has revised his will to include IIT-Delhi as a beneficiary, replacing Stanford University. Sanghi added that former students are also being encouraged to make the engineering institution a beneficiary in their insurance policies and that their request has been well-received by the alumnus.

Scroll reports that IIT Delhi has come up with "Giving Day". The first fundraiser, held in March, raised Rs 25 lakh. Over the next five years, the institution hopes to collect Rs 75 crore a year from its 46,000-strong alumni – a big leap from the Rs 15 crore it has received since 2016.

IIT-Delhi is in need of funds. As one of six centres of higher education designated an Institution of Eminence, it is aiming for a top 100 rank in global rankings such as the QS World University Rankings and Times Higher Education Ranking. At present, it is placed at 172nd rank in the first and between 501-600 in the second. The institute is aiming to hire international staff and faculty and open their

doors to international students as well. The administration has estimated an investment of at least Rs 2,500 crore. As an Institution of Eminence, IIT-Delhi will receive Rs 1,000 crore from the government over the next five years, but it must raise the remaining amount on its own.

Institutions of Eminence, is also in the process of "preparing a hostel privatisation model", considering off-campus accommodation for senior students and a "graded hostel fee model" on campus.

The Scroll further reports that IIT-Delhi has also sent a proposal to the Ministry of Human Resource Development for a "deferred Aadhaar-linked student fee scheme", by which students can pay their fees after graduation. The biometrics-based unique identity numbers would help the institution keep track of students after they have passed out. The proposal – which will have to be cleared by the IIT Council, the governing body responsible for all IITs – entails an external agency, like a bank, paying the institution a fixed amount after computing the cost per student and recovering the amount from students after they graduate, said IIT-Delhi deputy director M Balakrishnan". Balakrishnan further added that all students need not pay the same amount. The ones who get high salaries will pay more, in effect subsidising the education of those who choose to teach, join research programmes or do social work." He cites the example of Australian universities which are following this model.

IIT-Delhi reports that it generated just 23% of its recurring expenditure from internal revenue. In five years, however, it hopes to raise this to 50%. It plans to do this by getting more sponsored post-graduate programmes that train employees of companies in areas such as artificial intelligence and blockchain technology (a decentralised distributed ledger system central to cryptocurrencies like bitcoin). The fees for both are in the range of Rs 9 lakh and Rs 10 lakh a year, and revenue from such "continuing education programmes" grew by 200% last year. Over the next five years, IIT-Delhi hopes to make Rs 100 crore a year from these, as reported by Scroll.

Rao said the institution was taking a "more market-driven" approach to funding its growth.

Funds from sponsored research and consultancy doubled in 2017 to Rs 415 crore and the institution expects to make around Rs 300 crore from these in 2018. But, as the document submitted to the expert committee said, "The overheads paid by the sponsoring agencies is barely sufficient to even manage these projects."

Also, two new science and technology parks are expected to come up at IIT-Delhi's Sonepat and Jhajjar campuses in Haryana "will host industry laboratories", which are expected to fetch Rs 10 crore a year in "direct income" – from private parties that will use those facilities – and "indirect research funding" of Rs 50 crore. In addition, a "strong corporate relations programme" will add a further Rs 20 crore in "corporate social responsibility" funding, the plan outlined.

Anurag Rathore, who manages IIT-Delhi's relations with industry, has pointed out that the institution already hosts "Industry Day" on campus. Started in 2017, this is aimed at strengthening the collaboration between industry and academia.

While devising news ways to raise revenues, IIT-Delhi also plans to become more thrifty. In its plan, it promises to adopt "a strong process of cost auditing of various activities with a view to recover user charges proportionate to the actual expenses wherever possible". This, the administration believes, will "save the institute" over Rs 10 crore a year.

The bulk of the funds IIT-Delhi hopes to raise would go toward developing six "key thrust areas of research" — advanced computational systems, advanced biological and healthcare systems and engineering, materials and devices, energy and environment, smart and sustainable infrastructure and habitat, and Industry 4.0.

It also plans to promote interdisciplinary research by collaborating with other institutions and professional education councils. On the cards are joint PhD programmes with foreign universities – in Australia, Taiwan and Canada to begin with – where students can go back and forth between the partnering institutions. Similarly, there would be joint programmes with medical colleges such as a collaboration with the All India Institute of Medical Sciences (AIIMS).

An incubation centre has been proposed to promote "deep technology start-ups", which makes use of the latest developments in science and technology and is expected to come up this year while a Department of Design and a School of Public Policy will be operational from next year. Several "centres of excellence" would help bridge the gap between society and academia and also between departments. These include centres for "research on clean air", "energy and environment", and "cyber systems and information assurance".

To attract foreign faculty, IIT-Delhi has to advertise in international journals and participate in more conferences – which are "a hunting ground" for talent, according to Balakrishnan.

Foreign students are just as important for a higher international rank and IIT-Delhi intends to draw them to its research programmes. "We will offer fellowships," said Balakrishnan. They will be kicking off with 100 fellowships this year and would add more if needed.

IIT-Delhi wants to go beyond tech tag

July 24, 2018 https://timesofindia.indiatimes.com/city/delhi/iit-d-wants-to-go-beyond-tech-tag/articleshow/65110089.cms



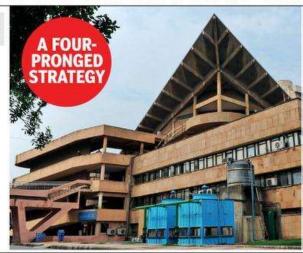
Armed with the promise of funds from the Centre under the Institute of Eminence scheme, IIT Delhi now wants to become a more inclusive institute, not just a top technology centre. Conforming with the conditions set by the human resources development ministry to get these funds, the institute has chalked out a plan to become more international in nature, improve its infrastructure and faculty, and move up the global ranking. To meet this goal, it has budgeted for an approximate expenditure of Rs 2,500 crore over the next five years, including the Rs 1,000-crore funding.

IIT-D director V Ramgopal Rao said on Monday that while the institute's global ranking was 172, it lost out on points due to lack of international students and a high teacher-student ratio. It has got zero for its international mix of both students and faculty.

₹2,500-CRORE OUTLAY FOR NEXT 5 YEARS TO MAKE IIT-D AN INSTITUTE OF EMINENCE

Interdisciplinary teaching and research

- Restructure post graduate programmes
- Initiate greater interdisciplinary research through collaborations with faculty of different disciplines
- Start courses and centres that go beyond traditional technical areas and into public policy and design



Financial resources

- Expected to get Rs 1,000 crore (over 5 years) from MHRD as part of IoE scheme
- > To generate internal revenues by greater connect with alumni, industry, HEFA, research grants, endowments and diploma courses

Internationalisation

- Increase interaction with top universities for faculty and student exchanges
- Launch PhD
- programmes with global universities
- Attract foreign students
- Bring in

Industry connect

- Tech park to host industry labs
- Industry-sponsored masters and doctoral programmes
- Diplomas for mid-career international faculty upscale in qualifications

Get innovative

- Encourage deep learning start-ups through incubator programs
- Support women entrepreneurship

Deputy Director M Balakrishnan said IIT had never advertised itself as a possible destination for international faculty. "But with the new grant, we can send a team to international conferences. They meet 30 to 40 possible candidates, and give us their feedback," he said.

Although the institute doesn't expect to get students from high-income countries, it is planning to target ASEAN countries, said Rao. While IIT does not have much autonomy in selecting undergraduate students, it can pick postgraduate students from different countries who would be given comparable grants to carry out research here, he added.

IIT is already in talks with Australia, Taiwan and Canada to start joint PhD courses. Rao said the students of the partnering universities would be allowed to go back and forth between the countries to complete their doctoral study, and a joint degree would be awarded. This programme is likely to be launched by the end of the year.

As research topics, the institute wants to move towards being more socially impactful. School of Public Policy, IIT-D's collaboration with experts in sectors of healthcare, agriculture etc, will allow for a multidisciplinary approach, claimed Rao. He conceded that while the research being conducted in the institute has been recognised in the global rankings, the "delivery systems" need to be worked on through industry participation.

To meet its goals, the institute is also going to rely heavily on internal revenue generation through alumni connections, endowments, grants and industry collaborations. It may also start diploma courses for mid-career professionals against higher fees.

While currently the fees comprise around 5% of its budget, IIT-D may, at the most, increase it to 10% in the next five years.

July 26

JEE (MAIN) and NEET to be held twice a year, Parliament told

https://www.clipper28.com/en/jee-main-and-neet-to-be-held-twice-a-year-parliament-told/

The Schools and engineering colleges with computer labs will be identified for this purpose, which can be used by any aspirant free of charge.



JEE (MAIN) and NEET to be held twice a year, Parliament told

In pursuance of Budget Announcement 2017-18, the Union Cabinet in its meeting held on 10.11.2017 approved creation of National Testing Agency (NTA) as an autonomous and self-sustained premier testing organization to conduct entrance examinations for Higher Education Institutions (HEIs).

NTA will conduct, inter-alia, JEE (MAIN) and National Eligibility cum Entrance Test (NEET)-UG twice a year in order to give adequate opportunity to candidates to bring out their best.

All the entrance examinations will be computer based, for which a network of test practice centres, especially for the aspirants from rural areas will be established so that they have ample opportunity to acquaint themselves with the computer based tests.

The Schools and engineering colleges with computer labs will be identified for this purpose, which can be used by any aspirant free of charge.

Extensive consultations were done with the concerned Ministries/ Departments of the Government of India as well as other stakeholders both from Central and State Government in a workshop held on 1-9-2017. Final decision and time table will be announced soon.

This information was given by the Minister of State (HRD), Dr. Satya Pal Singh today in a written reply to a Rajya Sabha question.

UGC bids to wind up debate on convocation dress

https://www.thehindu.com/news/cities/Hyderabad/ugc-bids-to-wind-up-debate-on-convocation-dress/article24523789.ece



Graduating students might not wear black robes in the coming days with the UGC opting for one country-one attire for universities across India.

Calls for professional designers and students to send their designs

The University Grants Commission (UGC) is moving towards one-country-one-convocation-attire formula. On Thursday, it issued an advertisement calling for professional designers and students to pitch in and send their designs for convocation dress which would: "Depict Indian culture and tradition... An expert committee will evaluate and select designs for suitable adoption by the Higher Educational Institutions".

The debate over convocation dress become a provocative one ever since Jairam Ramesh waded in. In April 2010, Mr. Ramesh, who was the then Environment Minister, removed his robe and told the students of Indian Institute of Forest Management at Bhopal: "I still have not been able to figure out after 60 years of Independence why we stick to this barbaric colonial relics". The debate has since morphed into an Indian tradition versus colonial relic. The 'one attire for one country' has triggered a similar debate.

"India is a diverse country. I feel each institution of higher learning should have its own distinct design and dress. Imagine students graduating from all the universities in the country wearing the same dress down to the sash and stole? That would be weird. The students are awarded their degrees by the universities. Why should the University Grants Commission get involved in selecting the design of the convocation robe?" asks designer and artist Orijit Sen.

Creating a tradition, last year, at the convocation at English and Foreign Languages University (EFLU), the graduating students wore beige coloured saris with golden border teamed with a red and orange sash. The men wore a beige coloured shirt, dark brown trousers with the red and orange sash.

Similarly, according to reports, the graduating students of NIT, Trichy, are expected to wear traditional attire and stole instead of the robe, breaking free from the old convention.

The National Institute of Fashion Technology (NIFT) has already moved to one-institution-one-convocation-attire mode. "Earlier, all the NIFT centres had different attire for convocation. But this year, we had one pattern for all the centres which reinforces the identity of the institution. We are big on handlooms and handicrafts and all the sourcing for the material was done locally," says Srivani Thadepalli, a faculty member at NIFT.

But not everyone is in favour of the one-country-one-dress idea. "The day of graduation is the biggest in one's career. This is the first step into adulthood. Not everyone looks good in the same outfit. In school, we wear a uniform. At least when we graduate, we should be given a choice," said Ajab Ali Akbar, a stylist and costume designer.

More 'institutes of eminence' to be selected despite row

http://www.universityworldnews.com/article.php?story=20180726182042421

The Indian government is set to expand its list of 'Institutes of Eminence' even as two of the private institutions listed among its first half a dozen institutions aiming for world-class status announced this month have come under question, and following rows over top public universities left off the list.

The government is also considering expanding the international panel formed to select the institutions to have more India-based academics to better monitor the progress of the selected institutions, according to the Human Resources Development ministry.

The Empowered Expert Committee (EEC) was set up in February this year to select 20 Institutes of Eminence – ten from the public sector and ten from the private sector to be granted increased autonomy and in the case of public institutions, extra government funding. However, only six were announced on 9 July, three public and three private from the 114 eligible institutions that applied.

"As and when we get more suggestions by the EEC, we will declare a total of twenty institutes for the status," secretary for higher education in the Human Resources Development ministry R Subramanyam said last week.

It has since come to light from an EEC report on the process that the committee initially recommended three private institutions and eight in the public sector. However, the higher education regulatory body the University Grants Commission (UGC) and the HRD ministry only accorded eminence status to three public and three private institutions to "ensure fairness" and a balance between public and private institutions.

However, of the private institutions named, the proposed Jio Institute to be build in Navi Mumbai is not yet in existence. According to the rules, Eminence status can be given to institutions not yet in existence on the basis of their vision plan but the selection of Jio backed by Reliance, India's largest company, sparked uproar over how a yet-to-be-established institution could be judged against the

track record of institutions in existence for decades.

A second private institution, Birla Institute of Technology and Science, Pilani (BITS Pilani) on the 9 July list has been "kept on hold" after it emerged that BITS is in dispute with the UGC over its yet-to-be approved branches in Goa and Hyderabad with a case lodged by BITS against the UGC in the Delhi High Court. The UGC insists that these branches are illegal as they were set up without UGC permission.

The third institution named under the private category is Manipal University. But critics expressed anger that the private institutions such as Manipal named under the eminence tag were ranked well below many publicly-funded universities in India's <u>national rankings</u> that did not make it onto the July list.

Longer Shortlist

It emerged that the EEC had shortlisted eight public sector institutions for the eminence tag — the Indian Institute of Technology (IIT) Delhi and IIT-Bombay in Mumbai, and the Indian Institute of Science (IISC) Bangalore which featured in the July announcement, as well as Delhi University, Jadavpur University in West Bengal and Anna University in Chennai, Tamil Nadu, and IIT-Madras and IIT-Kharagpur — the status of these latter five to be decided later by the UGC although the EEC head is on record as saying: "I am sure they will get it (eminence) in due course."

MK Surappa, vice-chancellor of Anna University, which was recommended for the eminence tag by the EEC but dropped by the UGC, said: "we had made a presentation before the EEC and now await government's decision."

Referring to IIT-Madras and Anna University, C Pichandy, a former general secretary of the Association of University Teachers, said the two institutions shortlisted from the southern state of Tamil Nadu had been bypassed and said the government should "reconsider the entire process".

The government has now said there will be a second selection round – though no dates were given for the announcement, and even though it is acknowledged that it will be difficult to balance the number of public and private institutions.

Expanded Committee

The EEC will be expanded for the second round. The current EEC is headed by India's former chief election commissioner N Gopalswami. The other members are Pritam Singh, former director of the Indian Institute of Management (IIM) Lucknow; Tarun Khanna a professor at Harvard Business School and Renu Khator, president of University of Houston, US.

With two of the panel's members based in the United States, the HRD ministry reportedly feels the EEC should have more India-based academics on board to "function smoothly", as it will continue to be relevant after the selection process is completed, and to review and monitor all institutes of eminence. The Ministry of HRD has so far not taken a final decision on the names of new EEC

members.

But even with more Indian EEC members, academics say trust needs to be restored over the selection process. According to the EEC's own report, the committee set up in February started work on 2 April, submitting its shortlist of institutes before the end of May.

It assessed the 114 applications within 45-50 days and did not conduct any field visits or tabular rankings of the institutions.

Nonetheless EEC Chairman N Gopalswami said due process had been followed as, according to the UGC guidelines, field visits were only "recommendatory in nature and not mandatory".

"We did not think field visits were necessary," he said. "Field visits to all 114 institutes would have probably taken a year. Besides it was felt that doing any tabular ranking of institutes would have been unfair and improper in view of the narrow difference between institutes."

Gopalswami said institutes had applied with detailed information. They were called to give individual presentations and the EEC sought clarifications and asked questions from the concerned institutions. It was all conducted in a transparent manner, he said.

Institutes of eminence are expected to break into the top 500 in at least one internationally reputed ranking framework within 10 years and come up in the top 100 over time.

Prakash Javadekar orders clean-up, tells UGC, V-Cs to weed out all predatory journals

https://indianexpress.com/article/india/prakash-javadekar-orders-clean-up-tells-ugc-v-cs-to-weed-out-all-predatory-journals/

In a meeting Wednesday, Prakash Javadekar is learnt to have asked his officers to get all vice-chancellors of central, state and deemed universities to review their recommendations made to the higher education regulator for inclusion of journals on its list.

The government has asked the University Grants Commission (UGC) to consider removing from its list all academic journals found to be substandard and predatory in an investigation published last week in The Indian Express on fake research paper shops in the country. In a meeting Wednesday, Union HRD Minister Prakash Javadekar is learnt to have asked his officers to get all vice-chancellors of central, state and deemed universities to review their recommendations made to the higher education regulator for inclusion of journals on its list.

"If any substandard/ predatory journals are found to be in the list recommended by the vice-chancellors, that would be held personally against the vice-chancellor concerned," reads the order issued Wednesday by Higher Education Secretary R Subramanyam.

The Ministry has also asked UGC to hold a meeting with citation database Scopus, indexing service Web of Science and ICI master list to examine whether they have done due diligence before including a journal in their lists.

"They may be asked to redo the exercise if necessary and send a certificate to UGC before 31st August, 2018, that all the journals which are in their database are genuine peer-reviewed and are of required standards," the order reads.

In a series of investigative reports starting July 19, The Indian Express reported on how India has emerged as one of the biggest markets for a business in which over 300 "predatory" publishers bring out journals that claim to be international and publish papers for a "charge" ranging from \$30-\$1,800 per piece.

Some of the prominent publishers featured in the investigation were OMICS, Austin, Science Domain, IAEME and IOSR Journals, which together bring out over 1,200 journals on subjects ranging from medicine to management.

The investigation found that the range of names linked to articles and conferences organised by publishers of such journals includes vice-chancellors, AIIMS directors and IIT professors. It also revealed that Hyderabad has become the hub of predatory publishing in India with companies based in the city, including OMICS, bringing out over 1,500 active journals.

July 25

IIT Kharagpur announces scholarships, awards for students

https://www.indiatoday.in/education-today/scholarships/story/want-to-study-in-india-s-premium-engineering-institute-iit-kharagpur-announces-scholarships-awards-for-students-1295356-2018-07-25

The Indian Institute of Technology (IIT) Kharagpur has announced several new awards and scholarships for its undergraduate students for academics and research following donations by many alumni and corporate.

As per the official press release, the IIT Kharagpur will give nine scholarships and two awards. They will be given this month onwards.

Here's what Dean, Alumni Affairs at IIT Kharagpur, Subrata Chattopadhyay said:

Since the lower cut-off for the economic background of students for existing scholarships and awards are at such a threshold that students falling in the marginally higher category do not qualify for the benefits, said Subrata Chattopadhyay.

Financial support to students

Considering the cost of living, these students too need some sort of financial support.

"We have increased the threshold of the current family income upto Rs 10 lakh and Rs 15 lakh per year for different scholarships to accommodate more students."- Chattopadhyay was quoted as saying in the statement.

Moreover, the institute will also be funding research at undergraduate level from its endowment fund built out of alumni donations over the years.

AIIMS Delhi signs MoU with IIT Kharagpur:

The All India Institute of Medical Sciences (AIIMS) Delhi has also signed a **MoU with IIT Kharagpur** for institutional collaboration in education, research outreach programme and medical services.

The primary objective is to promote interaction and collaboration among faculty members, scientists and students of the two premier institutes in their respective domains, to carry out joint academic and research programmes, joint supervision of master's and doctoral students, and collaborative research, according to a government official.

July 24

IIT Delhi looks abroad for boost in global ranking after eminence tag: Here's the big move in works

https://www.financialexpress.com/education-2/iit-delhi-looks-abroad-for-boost-in-global-ranking-after-eminence-tag-heres-the-big-move-in-works/1256038/

Several guidelines have been laid down by the University Grants Commission (UGC) for academic bodies to qualify for the status of an 'Institute of Eminence'.

In a big move to boost its world ranking, the Indian Institute of Technology (IIT) Delhi has decided to look abroad and attract foreign faculty and students to the premier institute. IIT-Delhi was recently accorded the status of an Institute of Eminence (IoE) and has decided to internationalise itself to improve its global standing, The Indian Express reported. Ranked at 172 in the QS Ranking, the institute now wants to hire foreign faculty in a bid to attract international students.

Discussing IIT-Delhi's plans, Director V Ramgopal Rao, said, "Our campuses are more Indian, they are not international enough. That is something we need to improve. If we need to get to the top 100, we have no choice but to recruit more foreign faculty and students. Internationalisation of our campus is very important to us."

On similar lines, the institute is also planning to hold joint PhD programs with universities in Australia, Taiwan and Canada. This is being done to target more PhD students through fellowships and assistantships.

IIT Delhi is also in the process of setting up a foreign students' hostel. A PhD Startup Incubator system will be commenced by the institute this month itself. This system will provide fellowships to those who build prototypes.

Several guidelines have been laid down by the University Grants Commission (UGC) for academic bodies to qualify for the status of an 'Institute of Eminence'. Once accorded with the status, these institutes shall be regulated differently from other deemed to be universities so as to evolve into institutions of world class in a reasonable time period.

In 2016, the Finance Minister had said in his Budget speech that the government is committed to empowering Higher Educational Institutions to help them become world-class teaching and research institutions. "An enabling regulatory architecture will be provided to ten public and ten private institutions to emerge as world-class Teaching and Research tnstitutions. This will enhance affordable access lo high quality education for ordinary Indians. A detailed scheme will be formulated."

Premiere IITs generate 138 Cr revenue from research, consultancy, inventions

https://news.careers360.com/premiere-iits-generate-138-cr-revenue-research-consultancy-inventions

The five premiere Indian Institutions of Technology (IITs) have together generated nearly Rs 140 Crore in revenue over past three years from inventions, research, consultancy and patents.

The five IITs - IIT Madras, IIT Bombay, IIT Delhi, IIT Kharagpur and IIT Kanpur, have continuously increased their revenue from their intellectual properties and earned Rs 35 Cr in 2015-Rs 16, 51.3 Cr in 2016-17 and Rs 52.38 Cr with IIT Bombay has been topping the list with Rs 45.65 Cr.

Prof Devang V Khakhar, Director, IIT Bombay, speaking on the achievement, said, "All the credit goes to our faculty members who have done very hard work, this has also been possible because good number of partnership with the industry for different kind of activities."

S No.	Name of IIT	2015- 16	2016- 17	2017- 18	Total Revenue by Institute (in Crores)
1	IIT- Madras	7.17	10.87	11.67	29.69
2	IIT- Bombay	10.55	17.11	17.99	45.65
3	IIT- Delhi	7.030	8.841	10.613	26.484
4	IIT- Kharagpur	5.155	6.05	7.895	19.10
5	IIT- Kanpur	5.19	8.43	4.22	17.84
Total Revenue (in Crores)		35.075	51.301	52.388	138.764

The data was revealed on a question raised by the Rajya Sabha member Dr Kanwar Deep Singh on the amount of revenue generated by top five IITs during the last three years. Dr Satya Pal Singh, Union Minister of State for HRD had quoted the amount while replying that many IITs generated significant amount of revenue from inventions, research, consultancy and patents etc.

The revenue thus generated, however, is independent from the annual grant provided to these IITs. The Minister clarified that there is no relationship between the revenue generated by the IITs and the annual budget allocated to them by the Ministry in the form of grants-in-aid (GIA).

He said, "The GIA is given for development of infrastructure and to meet recurring expenses such as

salary, fellowships, pension and other administrative expenses. The amount of revenue generated depends on the number of inventions, research and consultancy projects undertaken and patents filed by an Institute."

IIT-Hyderabad develops Artificial Intelligence to catch bikers without helmets

https://economictimes.indiatimes.com/tech/software/iit-hyderabad-develops-artificial-intelligence-to-catch-bikers-without-helmets/articleshow/65109382.cms



The solution uses convolutional neural network technology (applied to analyse visual images) which primarily mimics the human brain using AI.

In what could reduce the number of fatalities of motorcyclists, researchers at Indian Institute of Technology (IIT) Hyderabad have developed a solution using Artificial Intelligence (AI) for automatic detection of motorcyclists driving without helmets in surveillance videos. Recently, the institute signed a memorandum of understanding (MoU) with Hyderabad City Police to gain access to video data from the city's CCTV network. The technology is in the ready-to-be-deployed stage and the institute has already filed for its patent rights. This is how it works: The solution is partially installed in cameras and partially on the servers of the central police control room. A software is also installed on an embedded card attached to CCTV cameras which helps detect violators (motorcyclists without helmets) by sending out an alert to the central alert database. "It will be fully automatic along with a web interface to verify the alerts by the operators (traffic police, etc.). From there, it will be connected to the existing RTO website to generate challans (fines) and send a notification to the riders through SMS," explained Dinesh Singh, one of the research scholars behind this solution. Number of road accidents due to bike riders without helmets has been alarming. A Delhi Police annual report (released in 2017) revealed that of the total number of fatal accidents in the city in 2016, 35-40 per cent of the deaths were due to riders "not wearing helmets" or "poor quality helmets". "We have done significant lab experiments on sparse traffic at the IITH campus as well as dense traffic from Hyderabad city CCTV network. The results are motivating us to develop the complete software to deploy the system for realworld use," said C Krishna Mohan, associate professor, IITH. Krishna along with research scholars—Singh and C Vishnu— are the trio behind this technology. This solution can be deployed at the entrances of cities like toll bridges or on the selected checkpoints, especially road intersections. Next step for the researchers is to get an industry partner on board for making the technology commercially available. The solution uses convolutional neural network technology (applied to analyse visual images) which primarily mimics the human brain using Artificial Intelligence. The proposed system can easily be extended to other kinds of traffic applications, like detection of tripling, zigzag bike driving, traffic violations by other kinds of vehicles, according to Mohan. "Recent studies show that human surveillance proves ineffective, as the duration of monitoring of videos increases, the errors made by humans also increases," Mohan said. The research team has also developed a novel framework for automatic detection of road accidents in the surveillance videos. Mohan said that they have also proposed a framework for 'Snatch Theft Detection' in city-wide surveillance.

UGC to be replaced by 2 commissions including HECI, draft bill to be finalized by cabinet soon

https://www.indiatoday.in/education-today/news/story/ugc-replaced-2-commissions-heci-draft-bill-to-be-finalized-cabinet-soon-1294343-2018-07-24



Two commissions to replace UGC, proposes HRD Minister

While the future of the University Grants Commission (UGC) is at stake with the Higher Education Commission of India (HECI) taking its place, yesterday, Lok Sabha saw the new update on HECI Draft Bill 2018.

In the Parliament, Prakash Javadekar, MHRD minister has proposed that the UGC will soon be replaced by two commissions -- one for providing grants and the other for carrying out regulatory functions. On July 20, according to reports, about 8,000 suggestions were received by the government, however, it reached 10,000 suggestions from various quarters of the society by the end of the day. This final number was shared by Prakash Javadekar in the Parliament yesterday.

HECI DRAFT BILL TO BE APPROVED SOON

Prakash Javadekar told PTI that the HRD ministry is in the process of finalization of the draft bill which is based on suggestions received by the stakeholders.

In the Parliament, Javadekar also said that the draft has been amended and it would now go to the Cabinet for approval.

NO CHANGES IN RESERVATIONS FOR MINORITIES

According to the minister, there would not be any change in existing reservations for OBC, SC, and other minority groups.

HECI DRAFT BILL 2018

On June 28, MHRD had uploaded HECI 2018 or UGC Repeal Act 2018, the draft bill, on its official website

The bill had invited comments and suggestions from all quarters

Later, Javadekar extended the deadline to submit the suggestions from July 7 to July 20

NEED TO SCRAP UGC AND BRING HECI

Reportedly, the government also felt that the current commission remains preoccupied with disbursing funds to institutes.

July 23

IIT-M Prof talks about his world's first remote atom probe project

https://www.newstodaynet.com/chennai/iit-m-prof-talks-about-his-worlds-first-remote-atom-probe-project-111143.html



IIT-Madras was in the news recently when it launched the world's first remotely operable Local Electrode Atom Probe (LEAP).

This state-of-the-art equipment offers a 3D view of the atomic world when it scans any material. Professor of IIT-M's department of metallurgical and materials engineering, B S Murty is the man helming this ingenious project.

Speaking to News Today, Murty talks about how LEAP was incubated.

Murty was born in Vijayawada. After his schooling, he did his polytechnic and later completed diploma in metallurgy.

He was inspired by several teachers who made him swim deeper into material science. "That inspiration made me continue to go into this field more and more," says Murty.

Murty narrates how LEAP came into the picture. "From 1999 to 2001, I was in Japan doing research on a similar Atom Probe equipment but it was an older version," he says.

After returning to India, he soon realised about the vast research that could be achieved through LEAP. "India never had such equipment," says Murty. "It's an expensive tool."



He wanted this equipment to be used in India but he knew that asking for funds from the government would not be that easy. He later joined IIT-M in 2004. His academic research got noticed by other renowned scientists. It was in 2012 when Murty finally got serious to incubate LEAP.

But asking Rs 40 crore from the government was too big a task. That was when he went to the manufacturers of the LEAP instrument and told them to make it remotely operable. Murty wanted a large number of people to use LEAP.

He felt if it was remotely operable anyone from India can access it with ease without worrying about travelling and other difficulties.

They told him to give them a year and as promised on 25 August 2015, the CEO of the manufacturer of LEAP himself came to IIT Madras.

"Through his laptop, he connected a LEAP instrument which was in USA," says Murty. "At the time, the Director of IIT Madras was present." Seizing the moment, Murty convinced the Director about LEAP's capabilities.

"I told him that I'll rope in other IITs to be a part of this platform," says Murty. Soon, six IITs agreed. They contributed Rs two crore each. He also went to the Centre's Department of Science & Technology and asked them to contribute the rest of the money.

He spoke about LEAP's potential to the Secretary of DST. "He agreed and finally, the money came by March 2017," says Murty.

Around the world, there are about 90 to 100 LEAP instruments. But this is the only instrument that can be operated remotely.

Murty talks about the sea of application through LEAP. "From automobile to metallurgy to aerospace, LEAP offers a wide range of applications," he says.

Murty's journey to brig LEAP in India was almost for ten years. How did he stay motivated?

"It's because I always wanted my students to have the best," he says with a smile. "We have wonderful brains here. Only thing is that we don't have many resources. I always want my students to have the best of both worlds."

When asked for tips on being a good teacher, he says,"If you want to be a good teacher, then love what you do. You should do a job where you don't wait for Saturdays and Sundays."

July 22

To power-up education and research, AIIMS Delhi signed MoU with the IIT-KGP

https://www.brainbuxa.com/education-news/to-power-up-education-and-research-aiims-delhisigned-mou-with-the-iit-kgp-8529

AIIMS (Delhi) has signed a MoU with the Indian Institute of Technology, Kharagpur for collaboration in the field of education and research. According to a government official, the primary objective of the collaboration is to promote the interaction among the faculty member, scientists and students of both the institutes and to facilitate the joint academic, research programs and joint supervision of masters and doctoral students.

Areas such as Ph.D., MD-PhD, MSc-PhD and other courses have been identified as the areas of cooperation under the MoU. The opportunities of the coordinated internship programs for the students from both the institutes have also been identified as another important area.

As a part MoU both institutes have agreed to share, explore and use the data for the education and research purpose on the mutually agreeable terms. Both institutes have also agreed to protect the data shared in the process for the research purposes and necessary permissions will be taken from another institute wherever necessary.

HT Madras Incubation Cell sees surge in number of start-ups at 18% in FY18

https://www.business-standard.com/article/companies/iit-madras-incubation-cell-sees-surge-in-number-of-start-ups-at-18-in-fy18-118072200155 1.html

IITMIC claims the start up mortality rate in the incubators are lowest

The number of start-ups getting incubated in the Indian Institute of Technology, Madras (IITM) has seen an increase of 18 per cent during 2017-18, with the cumulative funds raised by these companies has gone up to Rs 8 billion. It has generated a cumulative revenue of Rs 1.35 billion during the year, said Bhaskar Ramamurthi, Director of IITM.

The IITM Incubation Cell (IITMIC), which links and synergises the sector-specific incubators, student pre-venture initiatives and translational research at IITM, claims that the mortality rate of start-ups in the cell is one of the lowest in the entire nation, at less than 20 per cent, while generally, the incubators have a failure rate of around 50-60 per cent. The higher presence of deep technology-oriented companies has resulted in the lower failure rate, said Tamaswati Ghosh, CEO of IITMIC.

"IITMIC's constant endeavour has resulted in incubation of 154 deep-tech start-ups, raising over Rs 8 billion in angel/VC (venture capital) investments, generation of Rs 1.35 billion cumulative revenue in the last financial year, the creation of over 2,500 direct jobs and filing of over 60 patents," said Ramamurthi.

The incubators, IITM's Rural Technology and Business Incubator, Bio- and Med-Tech incubators and others are situated in the IITM Research Park, close to the IITM in Chennai. The Research Park, set up in 2010, has its first phase fully occupied with over 70 companies and the second phase with 0.8 million sq ft of a built-up area already operational.

According to the Annual Report of IITM for 2016-17, IITMIC had around 130 tech start-ups incubated till the period, including 37 having IITM faculty as co-founders or minority shareholders. A total of 28 companies had raised total investment of Rs 6.42 billion from angel investors and VCs (venture capital) and a total of 52 companies were in the market with cumulative revenue of Rs 900 million in financial year 2015-16.

Of the over 150 companies that the cell has incubated, close to about 20 companies are inactive, though not closed down. Main reasons for the inactivity are that it was not the right market-product fit, or there were founder problems etc, which surfaces usually within the first two years.

"The inactivity rate is less than 20 per cent of our total start-ups, while start-up failure is generally on the higher side of 50-60 per cent or more in incubation centres," said Ghosh.

"It is a unique trend, considering the majority of our start-ups are product companies. Their journey to market and to investment is much tougher compared to the normal start-ups. A lot of understanding goes behind these companies. You are trying to enter tough, traditional markets or new markets, futuristic deep-tech products. Most of them are in the business to business model," she said.

From a very early stage, these companies are exposed to the potential customers and people from the industries. A lot of the industry leaders become their mentors, which will help the start-ups to change the product or tweak it to meet the market requirements. The industry-academia collaboration has been supportive to enable deep-tech ecosystem through mentors. The incubators see manufacturing, robotics, agriculture, renewables, energy, water, waste management, IoT (Internet of Things) companies etc. on the rise.

The research park gives the start-ups the environment of industry and the quality of research that takes place in the IITM, with faculties has standard at par with international research, helps these new ventures to grow better.

"There is an interaction with the industry at the early stage itself. Innovations are on the high level, and all of these resulted in start-ups in important areas for the nations. Solutions are backed by University-based research which is perfected by the feedback from the industry," added Ghosh.

Under the industrial consultancy and sponsored research initiatives, in 2017-18, 220 ministry-sponsored projects for a value of Rs 3.66 billion and 528 industrial research and consultancy assignments amount to Rs 1.17 billion has been sanctioned. This represents an all-time high in extramural research funding for the institute. During the year, 49 agreements were signed with various global and national companies, including Chennai Petroleum Corporation, Tata Steel Ltd, Dr Reddy's Laboratories Ltd, FL Smidth Pvt Ltd, said Ramamurthi.

IIT Hyderabad gets Rs 500 crore for research and infrastructure

https://deccanchronicle.com/nation/current-affairs/220718/iit-hyderabad-gets-rs-500-crore-for-research-and-infrastructure.html

The approvals also include a total of Rs 976.89 crores to IIT, Tirupati, and about Rs 365.23 crore to the NIT AP.

For providing additional funds to research and infrastructure, the Higher Education Finding Agency (HEFA) has approved a total of about Rs 8049.47 crore to 12 higher education institutions, including Rs 500 crore to Indian Institute of Technology (IIT), Hyderabad.

"In a big push to improve the research infrastructure in higher education institutions, the HEFA board on Friday approved fresh projects for Rs 8049.47 crore of 12 higher institutions, taking a total HEFA approvals to over Rs 10,000 crores," tweeted Prakash Javadekar, human resource development minister.

The approvals also include a total of Rs 976.89 crores to IIT, Tirupati, and about Rs 365.23 crore to the National Institute of Technology (NIT), Andhra Pradesh. IIT, Jammu, received an amount of Rs 1085.04 crores, and IIT, Jodhpur, was approved to receive about Rs 220 crore. The overall fund allocation for education has gone up from Rs 63,000 crore in 2013-14 to Rs 1, 10,000 crore in 2018-19, the minister said in his tweet.

July 21

IIT-Delhi to give full scholarship to international students for PhD courses

https://economictimes.indiatimes.com/industry/services/education/iit-delhi-to-give-full-scholarship-to-international-students-for-phd-courses/articleshow/65077206.cms



IIT Delhi is also setting up a hostel facility for international students. "International PhD students will enhance the institute's research and development," Rao said.

After being declared an Institute of Eminence, the Indian Institute of Technology Delhi will be the first IIT in the country to open its doors to foreign students via scholarships and recruit professors from abroad in a bid to improve its global standing.

The institute is looking at enrolling at least 500 international students in PhD courses on full scholarship over the next 12 months or so. This will help it to improve its position in the QS World University Rankings and the Times Higher Education World Reputation Rankings.

Currently, the institute has 9,000 students including 2,500 PhD scholars. Its international student count is almost 100. The scholarships to be offered to foreign students will be in line with those given to Indian students – Rs 28,000 (\$406) per month and free accommodation. Over the next five years, the institute is looking at a total of 5,000 PhD students, of which 1,500 would be from overseas.

No other IIT currently offers scholarships to students of foreign origin. Scholarships are restricted to only PhD students of Indian origin through government grants.

"The examination system to enter the IITs is so tough that it becomes difficult for foreign students to get through.

We intend to keep the scholarships for a limited time, till there is a regular inflow of students, post which we would withdraw this," V Ramgopal Rao, director of IIT Delhi, told ET.



- It intends to enrol at least 500 international students in one year
- It hopes to improve its global ranking after gaining the IoE status
- The status also gives the institute autonomy to take decisions like extending scholarships to foreign students

IIT Delhi is also forming a delegation to attract the teaching talent in East European nations and Russia

IIT Delhi, IIT Bombay and the Indian Institute of Science Bangalore are the three government entities among the six given the status of institutes of eminence. The government intends to bring all six at par with other top ranked global institutes. As a result, the three government institutes will be given more autonomy and additional funds by the state. So far, Indian institutes including IITs score poorly in terms of taking in international students and hiring foreign faculty members. IIT Delhi is working on ways to attract East European and Russian teaching talent.

"Attracting international faculty is difficult due to failure to offer high remunerations. We are soon sending a delegation to East European countries and Russia where we would be able to tap teaching talent as remunerations there are almost the same as that at IITs," said Rao.

IIT Delhi is also looking at intensifying its interdisciplinary and interinstitute research with a top-down approach. "IITs are working in silos. We are trying to bring people across departments and other institutes to collaborate on solving bigger problems," he said

IITs welcome MHRD's move to increase number of women in institute

https://timesofindia.indiatimes.com/city/mangaluru/iits-welcome-mhrds-move-to-increase-number-of-women-in-institute/articleshow/65075151.cms

The Union government's decision to improve the gender ratio at engineering colleges to at least 20% or one woman out of every five students by 2020 has been widely hailed by academics. The new initiative of Indian Institutes of Technology (IITs) will help female aspirants to look for greener pastures in the field of engineering.

The ministry of human resource development (MHRD) had learnt that only a small number of women join prestigious institutions like IITs. Last academic year, it was one in every 10 admissions, despite them faring better than men at the plus 2 level. To balance this gap, the MHRD had directed all 23 IITs to make sure at least 14% of their seats went to women in the 2018 academic year. Accordingly, at least 550 extra seats will be created as per new directions. The proportion of girls in IITs has been fluctuating over the past few years, with 8.8% in 2014 to 9.15% in 2017.

'Number of girls In IITs must increase' GENDER RATIO AT IIT MADRA Kharagpur (WB): President Ram Year Course Male Female Total admissions Nath Kovind said girls often out-2013-14 UG 2.871 410 3.281 score boys in board examinations, 2014-15 UG 2,949 425 3.374 colleges and universities, but their number is "distressingly low" in the 2015-16 UG 3,457 501 3,958 IITs and it has to increase. 2016-17 UG [4 Years] 1,740 242 1,982 In 2017, of the 1,60,000 candidates who appeared 2016-17 UG [5 Years] 1,740 249 1,989 for the IIT joint entrance examination, only 30,000 384 2,436 2012-13 PG 2,052 were girls. Of the 10,878 students who had been admitted to undergraduate classes of IITs in the same 2013-14 PG 2,343 441 2,784 year, only 995 were girls, he said while delivering the 2014-15 PG 2,324 451 2,775 64th Convocation address of IIT Kharagpur on Friday. 2015-16 PG 1,547 314 1,861 "This issue continues to puzzle me.... This cannot go 2016-17 PG [2 Years] 800 120 920 on, we need to do something about these numbers," 2016-17 660 PG [3 Years] 173 833 Kovind said. PTI

Udaykumar R Yaragatti, director, Malaviya National Institute of Technology, Jaipur, told TOI that compared to NITs, the ratio of women in IITs is worrisome, and that this new move will bridge the gap. "One of the interesting things about creation of new seats is that it will not encroach upon seats of men in the already existing seat allocations," he adds. Yaragatti is also the present chairman of the Central Seat Allocation Board (CSAB).

Rajshekhar Ratrey, VP, Educational Content, Toppr.com says diversity is the crux of our society. "Encouraging women to take up engineering is not just about equal opportunities in education, but it is also about creating a more balanced society in the future. Out of the total candidates who appeared in the JEE (Advanced) 2018, only 20% are women, and this trend has been observed year after year. Maybe this move will encourage female participation in JEE in the coming years," he said.

Sharing data from their firm, he said 14% of their students who qualified for JEE (Advanced) 2018 are

women. "Every 3 out of 10 women, who used our services, qualified for JEE (Advanced), as opposed to the national average of 1.7 out of 10. About seven women students have scored an AIR under 1,000. Our highest female representation is from the states of Telangana followed by Karnataka, Andhra Pradesh and Maharastra," he said.

Overall, across the country, while 31,021 women candidates appeared in JEE (Advanced) 2018, only 2,076 qualified, which is a qualification rate of 7%, which was double in the case of men candidates.

Advantage for boys

Some of the girls students in IITs expressed that they feel at a disadvantage as their numbers are less. "Being in less numbers in the class, we cannot always ask help from those who are from the opposite sex, as they often don't want to help us when it comes to assignments," says a woman student at IIT. "Boys who are in large numbers discuss academic matters in groups and clear their doubts. In departments such as mechanical engineering, the imbalance is worse, as there are even less women," she adds.