Newspaper Clips
May 8, 2014

Two IITs send most computer science professors to top US universities

IIT Madras, IIT Kanpur were the fifth- and ninth-largest contributors of faculty to computer science programmes in US universities
http://www.livemint.com/Politics/LAoRPYetIU5Y8jADsa3O9H/Two-IITs-send-most-computer-science-professors-to-top-US-uni.html

IIT Bombay, IIT Delhi and IIT Kharagpur were ranked 12th, 18th and 26th, respectively. Photo: Mint

New Delhi: Two Indian Institutes of Technologies (IITs) are on the list of top 10 undergraduate colleges that contribute computer science professors to top American universities, according to a Brown University study published on Tuesday.

Covering 2,200 professors across 50 top US universities, the research listed 37 undergraduate colleges that supply these professors. The US universities covered include Purdue, Massachusetts, Stanford and Yale.

While IIT Madras and IIT Kanpur were the fifth- and ninth-largest contributors of faculty to computer science programmes in American universities, IIT Bombay, IIT Delhi and IIT Kharagpur were ranked 12th, 18th and 26th, respectively.

Alumni from the five IITs together accounted for 122 faculty members in top 50 American universities, second only to Massachusetts Institute of Technology, the top contributor with 127 faculty members.

The data also showed that while the professors received their bachelor degrees from India, none received their doctorates from a university in the country.

“We were aware that a lot of our alumni did doctorates and then joined faculties in top US universities and this study just validates that,” said Bhaskar Ramamurthi, director, IIT Madras. Only top rankers in the entrance exam to the IITs, considered to be the world’s toughest, are admitted into the computer science programme, and statistically, many of these students tend to stay in academics, Ramamurthi added.

Ramamurthi said the top IITs receuit an average of 35 professors a year, with at least half being doctorates from top universities, mostly in the US. “The question that this data raises is hoe we can create better conditions so that top professors from outside India can join our faculty,” Ramamurthi said.

Watch: This short film by IIT Kharagpur students will show you the darker side of Facebook addiction

http://ibnlive.in.com/news/watch-this-short-film-by-iit-kharagpur-students-will-show-you-the-dar/470201-79.html

It is a daily routine to log in to Facebook and scroll down to check every update on your newsfeed. Your newsfeed will always have different kinds of people some will include you real life friends and a few people here and there you have no idea about, but still have them on your list anyway. This short film called 'sTaTus' is the story of one such Facebook addict.

This short movie is produced and directed by a bunch of students from IIT Kharagpur who call themselves Naughty IITians. The story revolves around a college student Dev, who comes across a Facebook profile called 'Aleron Sunnshine', which is later discovers is girl called Isha. This anonymous profile intrigues this student so much that he completely forgets about his exams and stalks this profile every day. He finds out details about this girl through a mutual friend and figures she is depressed after one of her closest friends committed suicide.

The virtual world takes over Dev's life and he spends hours every day thinking of what that anonymous profile must be going through. It touches upon the dangerous side of social media and how seriously we have begun to take the virtual world. Though the YouTube video is over a year old, it is still pretty much relevant.


IBN Live

Indian Express ND 08/05/2014 P-11

56% freshers from quota at IIT Bombay feel 'discreet' bias

MIHIKA BASU
MUMBAI, MAY 7

A SURVEY of first-year IIT Bombay students by Insight, the student media body in the Powai campus, reveals that an alarming 56 per cent of students belonging to various categories, like SCs, STs and OBCs, feel discrimination does exist in the institute, albeit in a discreet manner.

While an assessment of IIT-JEE results has shown success is skewed in favour of students with urban and high-income background, this is the first time an IIT has looked at the issue of biases and discrimination on the campus on the basis of region, language, caste, religion and category of the students.

While 69 per cent of freshers denied any caste discrimination, 28 per cent said it was there in an indirect manner while three per cent said they had witnessed it first-hand.

The survey was conducted on first-year students who joined IIT Bombay in July 2013. A questionnaire with 25 questions was sent online to them at their official IIT Bombay email address. The entire survey took a month.

"The campus attracts students from highly different backgrounds each year, which is why certain biases are bound to exist. Also, the transition to life in a big city like Mumbai and the IIT system can vary severely because of these biases. Hence, the primary motivation for undertaking this survey was to find out these biases and to look at whether the institute made any attempts to bring students at a level footing," said Chirag Chadha, IIT Bombay student and chief editor of Insight.

The main difference among students of general and other categories, according to the survey, was not due to any negative sentiment, but because of the differences in their academic performance. Results show the average cumulative performance index of general category, OBC and SC/ST students is 8.09, 6.6 and 5.9, respectively. Further, 60 per cent of reserved category students said they experienced more academic pressure than general category students as they felt they "lag" the latter in academics.

"This was a demoralising factor that hit them hard when they got their results. The conclusion that can be drawn is that the discrimination against reserved category students is not direct and open, but indirect and discreet. The major disparity between students of general and reserved categories is the extra academic stress perceived by reserved category students," said the findings, published in the Insight newsletter.

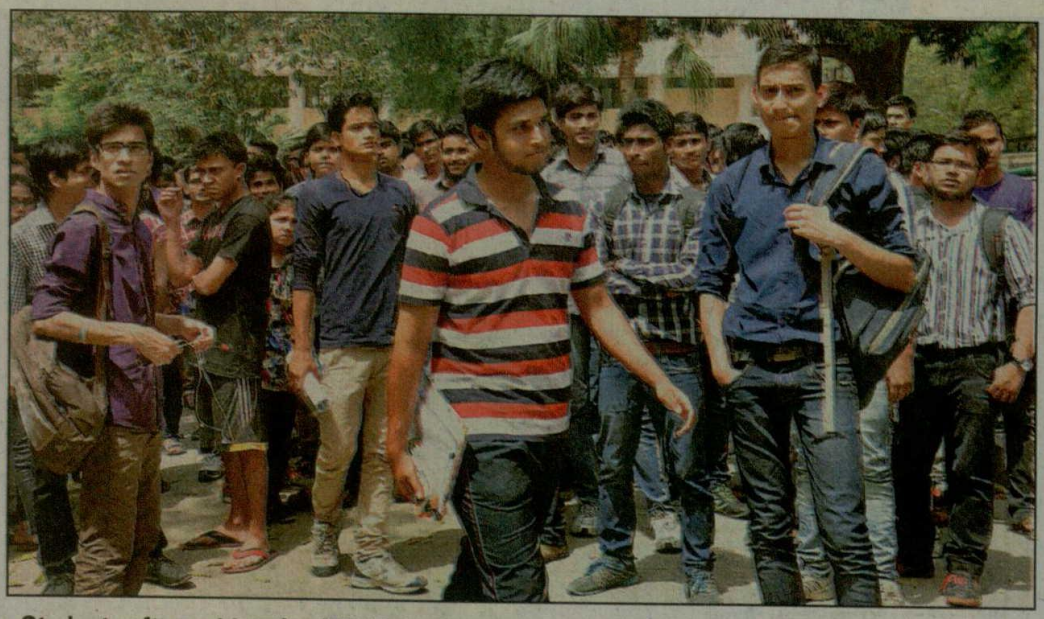
Amar Ujala ND 08/05/2014 P-7

जेईई पर रोक संबंधी याचिका पर नौ मई को सुनवाई

नई दिल्ली (ब्यूरो)। भारतीय प्रौद्योगिकी संस्थान (आईआईटी) और केंद्रीय माध्यमिक शिक्षा बोर्ड (सीबीएसई) को जेईई मेन व जेईई एडवांस के आधार पर इंजीनियरिंग संयुक्त प्रवेश परीक्षा (जेईई) आयोजित करने से रोकने की मांग करने जनहित याचिका को हाईकोर्ट ने सुनवाई के लिए स्वीकार कर लिया है।

जस्टिस बीडी अहमद और जस्टिस सिद्धार्थ मृदुल की खंडपीठ याचिका पर नौ मई को सुनवाई करेगी। पुष्पांजलि दास ने याचिका दायर सीबीएसई और 16 आईआईटी को जेईई मेन 2014 की परीक्षा एक सप्ताह में कराने की मांग की है। याचिका में प्रश्न पत्र के अलग-अलग सेट का इस्तेमाल रोकने की भी मांग की गई है। ऐसा होने पर सभी छात्रों को समान अवसर नहीं मिलेगा।

HT.COM ND, 08.05.2014, P-6



■ Students after writing the JEE Mains exam. Nearly 38% of total students who have qualified for JEE Advanced are from Andhra Pradesh, UP and Rajasthan FILE

Nepal, Bhutan students qualify in IIT entrance

Vanita Srivastava

Eight students from Nepal and Bhutan have also qualified for the IIT entrance exam this year, according to preliminary data of those who have qualified for the Joint Entrance Exam (JEE advanced).

Interestingly students from Andhra Pradesh, Uttar Pradesh and Rajasthan account for nearly 38% of those who have qualified for JEE (advanced).

There are some examination centers for JEE (mains), outside India including Nepal, Srilanka, Singapore and four centers in Gulf countries. JEE (mains) is the filtering exam for JEE (advanced), the exam held for admission to 16 IITs. More than 12 lakh students had appeared for JEE (mains).

After the results of JEE (mains) were announced on Friday, the top 1.53 lakh students were declared eligible for appearing for the JEE (advanced) exam.

Those who could not make it to JEE (advanced) will seek admission to NITs and other centrally funded institutes according to their final score, which will be known on July 7 after all the board results are out.

"We did not have students from Nepal and Bhutan last year qualifying for the IIT entrance exam. If this year some students have qualified, it is a positive sign. It will indirectly reflect on the ranking of IITs,' said HC Gupta, JEE-Advanced 2013 chairperson.

Like last year, the maximum number of students to have qualified for the JEE (advanced) this year is from Andhra Pradesh, 21,818 followed by Uttar Pradesh, 19,409, Rajasthan, 16,867, Maharashtra, 13,626 and Gujarat, 10,037. In Delhi there has been a marginal increase in the number from 7478 last year to 7629 this year.

Last year nearly 18% of those who had finally qualified for IIT were from Andhra Pradesh followed by Rajasthan, 17% and Uttar Pradesh 12%. The registrations for JEE (advanced) will continue till May 9. The exam will be held on May 25 and the result will be declared on June 19.

Financial Express, ND 08/05/2014 P-18

In India, Small Research Firms Aim Big

India is not known for developing drugs, let alone cancer drugs, but a few small and niche firms are trying exactly that, reports Hari Pulakkat

R&d WARRIORS: Team members of Aurigene Discovery, led by CSN Murthy, CEO (extreme right); and Monideepa Roy, associate director of Invictus, a startup focused on cancer drugs

Photo: AMRENDRA JHA

This February, the Bangalore-based drug discovery services company Aurigene Discovery Technologies signed an agreement with Pierre Fabre, a French pharmaceutical company. It was to develop into clinical trials a new molecule, called AUNP-12, supposed to be effective against several types of cancers. Although seemingly a minor announcement, it was loaded with implications. It was the first anti-cancer molecule that Aurigene has licensed. It was also the first molecule from India in an emerging class of cancer drugs, supposed to change the face of cancer therapy in the next decade.

Aurigene, a 100% subsidiary of Dr Reddy's Laboratories, was set up in 2001 to provide drug discovery services to other pharma companies, while Dr Reddy's continued its own drug discovery and development. This model initially hit roadblocks, but business improved later on. In 2009, Dr Reddy's transferred all its discovery-related assets to Aurigene and opted out of this risky activity. Aurigene now continues offering drug discovery services to external customers while doing its own drug discovery programmes.

In the last five years, Aurigene has spent Rs 200 crore on internal cancer drug discovery programmes. Now it spends Rs 50-60 crore every year on cancer drug discovery, and has seven molecules a year or two away from hitting clinical trials. They are in a hot new area: immunotherapy. This emerging area, which has seen the launch of the first few products recently, is expected to change the direction of cancer treatment. Although ridden with failures, drug discovery is still active in many Indian companies, but it is not often that a drug candidate out of India is licensed in an emerging area. Says CSN Murthy, CEO of Aurigene: "It was a significant event for us because it was a validation of our differentiated assets."

Although several global Big Pharma and biotech start-ups have immunotherapy molecules, Aurigene has a completely different class of them: peptides and peptidomimetics (molecules that mimic peptides). Aurigene is the only company in the world developing peptides against immune checkpoints, natural mechanisms that cancers hijack to evade the immune system. No one knows what kind of molecules, and in what combination, will be effective in cancer immunotherapy. But Aurigene's pipeline and the recent deal have brought it to the notice of the international drug discovery community.

Although drug discovery in India is two decades old, it has not yet set the industry on fire, and the global pharma market is still looking forward to a drug discovered in the country. But cancer drug discovery is not absent in India. Piramal Group, for example, has four molecules in clinical trials but none in areas that are completely novel. Now, a few smaller Indian companies are looking to wet their feet in unchartered waters. It is fraught with risks, but the rewards of success are extremely high.

New Templates

Consider Invictus Oncology, a Delhi-based company. It grew out of a Harvard research project, which developed a method to get a drug directly into cancer cells. The method is known as supramolecular chemistry, which consists of building molecular systems out of smaller components. It is like building a structure with Lego blocks, each individual block being a separate drug. A large drug complex can evade the healthy tissues, which have small pores, and go directly to the cancer cells. It is a powerful method in principle. No company in the market is using this method yet; not many are even exploring this method for cancer drugs.

Invictus was set up in 2011 with a total funding of $4 million from investment firms Navam Capital and Aarin Capital. It was then the first cancer-focussed drug discovery company in India. Instead of just using old molecules in a new way, it is also developing new molecules to be used with the new method. If the method works well, it would need an additional $20 million to take the drug to phase-II clinical trials, after which it needs to look for a partner. "It is a very audacious goal," says Ranjan Pai, CEO of Manipal Education and Medical Group, and an investor in Aarin Capital. "But if this is successful, people will realise that it can be done out of India."

The method of Invictus can be used with many existing drugs as well. Cisplatin, a powerful but toxic platinum-based drug that is now out of patent, can be made less toxic by supramolecular chemistry. Cisplatin goes through the kidney pores and thus harms this organ, while a fabricated Cisplatin-based larger molecule cannot go to any tissue but the cancer. Invictus is designing its own platinum drugs as well that are less toxic than Cisplatin. Says Shiladitya Sengupta, assistant professor at Harvard Medical School and Invictus co-founder: "We are developing a technology platform rather than a few drugs." The first of its drugs could be a year-and-a-half from clinical trials.

While we wait for Invictus to file an investigational new drug (IND) application, another Delhi-based firm is also readying an anti-cancer molecule. Curadev, set up in 2010 to do drug discovery, does services like Aurigene for its bread and butter while also working on its own programmes.

According to Arjun Surya, chief scientific officer of Curadev, the company has a few molecules under development, including for cancer immunotherapy, for which it has filed patent applications. The area of immunotherapy is so hot that Curadev had already got enquiries for acquiring this asset, but the company is pressing on to develop it on its own. With all these programmes now accelerating, no one should be surprised if an Indian anti-cancer molecule hits the market in a decade.

Indian Anti-Cancer R&D: a Timeline

Till 1990s
Cancer biology research in government labs, no attempt to make drugs

Early-1990s to 2000
Large pharma companies Dr Reddy's and Ranbaxy set up drug discovery units, focus on developing simple molecules and 'me-too' drugs. No significant cancer drug programmes, but the foundations are laid for future programmes

2000 to 2010
Indian drug discovery programmes struggle. Clinical trials start in India as a business, creating a skill-base for drug development. Biocon forms strategic partnership on cancer drug development with Cuban firm CIMAB

2000 to 2014
Some start-ups and small companies find promising anti-cancer candidates, raising the hope that an Indian molecule will move into clinical trials within the next four years

Economic Times ND 08/05/2014 P-7

Crunching Numbers to Make Research a Breeze

Noida-based Innovaccer dives deep into data in areas such as social science, public policy, law & public health

KRITHIKA KRISHNAMURTHY
BANGALORE

When a business professor in Brazil wanted to find out the most economical way of transporting kids to schools in rural areas, he turned to one of the most unlikely quarters for help — a Noida-based data analytics company.

The professor, Paulo Rocha e Oliveira, had his army of students at IESE, one of the top 10 business colleges in the world, to work on the problem for one-and-a-half years it was only with the involvement of Innovaccer that he is getting close to a solution.

Innovaccer is different from most other data analytics firms that work only with corporates. The nearly two-year-old startup works with researchers, giving them access to data that help them solve issues of the real world. "MBA students don't have the engineering and computer science muscle required for a project of this scale," said Rocha e Oliveira, who has been working over the past three years to design travel routes for school buses. "Previously, I didn't have the skills available to make it a viable project. Innovacer was a natural option."

Innovaccer dives deep into data in underserved areas such as social science, public policy, law and public health and works alongside researchers anywhere between one month and a couple of years on their projects.

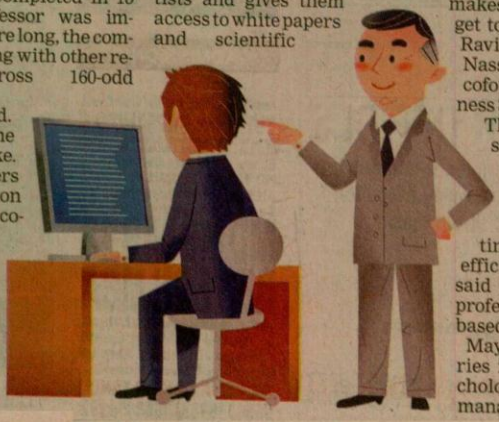
Its team of coders, statisticians and domain analysts work with graphic designers to help make sense of the story hidden beneath the information for researchers in The Wharton School, Harvard, Stanford University, MIT and London Business School, among others. "A lot of academia is moving toward data-centric analysis. We are here to simplify that," said Abhinav Shashank, 26-year-old cofounder of the company, who graduated from IIT Kharagpur.

The company was started in 2012 when an IIT Kharagpur alumnus and Harvard Business School professor Prithwiraj Choudhury asked help in pulling out director data from financial statements of US companies.

What would have typically taken a year was completed in 15 days. The professor was impressed and before long, the company was working with other researchers across 160-odd universities around the world. "The pitch was the easiest to make. The researchers readily jumped on board," said co-founder Sachin Jaiswal, 25, an alumnus of IIT Kharagpur.

Although data analytics has been used in domains such as retail, insurance and healthcare, research has remained unexplored so far.

Few businesses centered on scientists and researchers have cropped up in the past. Gurgaon-based Knimbus that operates a networking site for scientists and gives them access to white papers and scientific journals is one such example. Several colleges including Stanford, Massachusetts Institute of Technology have in-house tools for researchers. But none are as comprehensive as Innovaccer.



"It's not new, but it is an efficiency play in a new vertical. And it makes sense for researchers to get top talent for the job," said Ravi Gururaj, president of Nasscom Product Council and cofounder of Harvard Business School Angels.

The alternative for researchers is to hire interns or freelancers, something that does not always yield the best results.

"They were a substantial time savings for us and their efficiency saved us money," said Bill Mayew, an associate professor at North Carolina-based Duke University.

Mayew's research uses theories from economics and psychology to better understand managerial communication.