

Newspaper Clips

October 16-17, 2013

October 16

TOI, Mumbai

IIT-Bombay students find fault with ranking agency

MUMBAI: Students at IIT-Bombay have claimed that the QS World University Rankings are not accurate, at least when it comes to their institute.

On at least three parameters, which cover 70% of the weightage given to institutes and universities, IIT-Bombay is ahead of IIT-Delhi. IIT-Delhi still managed to rank higher than the institute in Powai.

The students analyzed the data available for the QS World Rankings in 2012 to find if it gives a true picture. They compared the data available for IIT-Bombay and Delhi and in one of the parameters even compared it with the National University of Singapore (NUS), which is among the top universities in Asia in the rankings.

The agency awards 40% weightage to academic reputation and 10% to employer reputation. In the available data for 2012 on the official QS website, the students found that IIT-B fared better on both the parameters compared to IIT-D.

For academic reputation, IIT-B scored 183 and IIT-Delhi 215. For employer's reputation, IIT-B was at 65 and IIT-D at 75.

Regarding the student-faculty ratio (SFR), which holds 20% weightage, IIT-B has a better ratio. The fewer the students per faculty member, the higher should be the scorer for this parameter. But according to QS, the normalised scores for SFR are 81.4, 35.4 and 28.9 for NUS, IIT-Delhi and IIT-Bombay, respectively. The students independently arrived at the SFRs of 17, 18 and 15, respectively, from official sources and said that the normalized scores of QS and the raw data show no correlation. IIT-B's SFR was better than that of even NUS.

Another parameter, which puts IIT-B's score way below other IITs, is the 'citations per faculty'. Students found from the research and development office that "the papers need to specify an affiliated institute where the research was undertaken. IIT-B does not enforce a standard convention for stating the name, and therefore could be counted as different institutes even with variants like IIT-Bombay, I.I.T. Bombay, IIT-Powai and IITB".

The comparative report is published in the latest in-house print edition of the student magazine, InSight.

"With a lot of media attention to the QS World Rankings, we were very interested in the exact parameters that QS uses for the rankings. However, when we dug up and analyzed the data, we found a lot of inconsistencies, even among the relative ranking of IITs. Our message is that when people use these rankings, they should do so with a pinch of salt," said Nivvedan, editor of InSight.

Deccan Chronicle

IIT-M's first foreign office in Silicon Valley

“As most of our alumni work in the Silicon Valley we are likely to open our first international office there. We expect to raise 10 times more funds in future from this initiative,” said Prof. R. Nagarajan, dean of international relations and alumni affairs at IIT- Madras, revealing that the institute had appointed a consultant to advise it in various matters, including fund raising and recruitment.

IIT-M takes cue from Kanpur counterpart

IIT-M is clearly going in the way the IIT- Kanpur, which set up its international office in New York recently to select faculty from the US and raise funds for its administration.

Prof Bhaskar Ramamurthi, director, IIT- Madras revealed that it had a dedicated office to handle relations with donors in North America.

“Relations with universities are handled by our office of international relations as we have a large number of collaborations across the world, including the US,” he said.

“There has been a significant increase in our fund raising over the past two years. While in 2010 we raised `3 crore, in 2011 we raised `10 crore and last year, `12 crore. Until now it has been a volunteer effort,” Prof R. Nagarajan, dean of international relations and alumni affairs at IIT- Madras, explained.

DNA

IIT-Indore don develops device to read emotions

Indore: An associate professor at IIT- Indore Dr Ram Bilas Pachori has claimed to have made use of Brain to Computer Interfacing (BCI) to read human emotions. The technology can make easier and more accurate diagnosis of neurological and psychological problems, he says.

Dr Pachori fed electrical signals emitted by neurons present in the brain into a computer running on a particular algorithm and obtained Electroencephalogram (EEG) signals.

The EEG signals thus obtained indicated different patterns depending on mood of the person.

Dr Pachori said, "So far doctors have relied upon signals from heart (ECG) to diagnose problems. Now it is time to diagnose problems with the help of brain waves."

It is very difficult to influence brain signals, hence the results are more accurate, he added.

The technology can be used in assisting physically disabled people to interact with real world. It can also help understand the needs of a newly born child or a mentally retarded person, he said.

In experimentation, EEG signals were collected from four healthy persons (aged 20-35) during audio-visual stimulus, recalling past emotional events etc., and mapped into four basic emotional states of mind--happy, sad, neutral and fear.

The 34-year-old researcher said, "One may be sad from inside but pretend to be happy to the outside world. Speech and facial expressions can be influenced to portray a different picture. But brain signals can't be influenced."

When funny clips were shown to the subjects during the experiment, the EEG waves showed that the subjects were 80 per cent happy, 13.33 per cent fearful, and 3.33 per cent neutral and sad at the same time. Hence the study shows there can be different emotions at the same time.

He claims that EEG signals can be fed to smart phone through wireless communication and an EEG monitoring app in smart phone can tell emotional state, whether one is happy, sad or anything.

This can be connected to music devices too. It'll sense the mood and play music accordingly.

Dr Pachori said, the President of India [Pranab Mukherjee](#) has evinced interest in the research and assured him all support.

France wants tie-ups with NID, IIM-A

Express news service Posted online: Wed Oct 16 2013, 03:43 hrs

Ahmedabad : The French government is keen to have tie-ups in research and design between India and France with a focus on the National Institute of Design and Indian Institute of Management, Ahmedabad. Interacting with mediapersons at the NID, Ambassador Richier said that France has proposed initiatives to encourage exchange programmes for students of these institutes. "Every year 25 students from IIM-A undertake exchange programmes in premier management institutes in France," he said. "We are planning of organising exhibitions for renovation of old havelis of Ahmedabad. For this, tie-up with NID is being worked out," he said. The French Embassy and India-French Centre for Advanced Research will host the Indo-French Engineering Design Conclave in cooperation with NID in Delhi on October 20-22.

DNA

Privatisation isn't the solution for India's education woes: Subhashini Ali

Speaking on Zee Media's Bharat Bhagya Vidhata, member of the Communist Party of India (Marxist) Subhashini Ali stressed that without maintaining quality in education, the goal of free and compulsory education won't yield desired results.

Rising cost of education, poor infrastructural facilities, low pupil-teacher ratio and scarcity of skilled jobs are worsening the quality of education in the country said Subhashini Ali.

In an exclusive interview on Zee Media's *Ek Naari Aisi Bhi* under the Bharat Bhagya Vidhata initiative, President of the All India Democratic Women's Association (AIDWA), Ali reckoned the need to provide more and more educational institutions in rural India so that the participation of rural girls can be enhanced after completion of their primary level education.

"It is unfortunate that many girls from the rural areas leave schools after completion of their primary education due to unavailability of options for higher education and many can't afford to go to cities," claimed Ali.

Not surprisingly, according to National Sample Survey (2009-2010) (released on June 2013), in urban areas, about 15% of male and 11% of female are graduates or above. This is much higher than the rural areas where only 3.7% of males and a mere 1.6% of females have gone up to graduation or beyond.

Taking a different stand on the issue, Nishi Pandey, professor, department of English, University of Lucknow said, “Many families in rural India don’t send their daughters to cities for higher education because they think that cities are unsafe. For people in rural India, marriage but not education is the first priority.”

ASER 2012 report published by Pratham NGO also shows that the proportion of out of school children has increased, especially among girls in the age group of 11 to 14 in rural India.

Not only this, the declining state of education gets worse with low availability of skilled jobs for educated Indians.

According to a report by “Employment and Unemployment Survey 2012 report” by ministry of labour and employment, unemployment in India rises steadily with education level. While unemployment among the illiterate is 1.2%, unemployment among graduates is 9.4% and among post-graduates it is 10%.

The bigger cause for concern according to the labour ministry data is: the unemployment rate among rural educated youths is higher as compared to their urban counterparts. It stands at 13.9% for rural areas against 7.6% in urban areas.

Mood Indigo 2013: Registrations, ticket sale begin for the IIT fest

The registration and the ticket sale for the annual fest of IIT-B Mood Indigo has began.

Progressive Rock stars from USA, who had collectively been part of bands like Transatlantic and Flying Colors will perform at Mood Indigo on December 20th, 2013.

Mike Portnoy, founder of Dream Theatre band will perform with Neal Morse Band.

[Students can check further details here](#)

Mood Indigo is the annual cultural Festival of the Indian Institute of Technology- Bombay which will be held in December.

Rab Ne Bana Di Jodi, Fashion, Chak De India fame musicians Salim and Sulaiman Merchant performed on December 23, 2012.

Their fine selection of songs diversified from Sufi to Rock, from R&B to Soul and from Eastern to Western coupled with their powerful on-stage presence enthralled the crowd.

Thermal and A Quarter, a band from Bangalore and band Simple Plan also performed at Livewire Nite in OAT on December 22, 2012.

Porcupine Tree, Katatonia, Sumo Wrestlers, Asha Bhosale, Amit Trivedi, Shankar Ehsaan Loy, Chris Korn, Tararum Group, Victor Rubilie have earlier performed at IIT.

IIT Graduates Develop CRM Solution For Real Estate

by [Biztech2.com Staff](#) 15th October, 2013 in CRM

The software is suitable for real-time tracking, updates and analysis, inventory management, sale-purchase, lead generation and CRM.

A brainchild of IIT graduates Anil Kumar Nirmal and Anupam Saha, 'RealtoExpress' is a Customer Relationship Management software offering wide range of solutions. It gives brokers the right bandwidth to handle an array of customers, seamlessly. Catering to one of the fast growing sectors in the country - real estate, the software comes as a handy tool for real time tracking, updates and analysis, inventory management, sale-purchase, lead generation and CRM.

RealtoExpress helps provide complete IT solution to Real Estate Consultants which include campaign management, lead management, task management, inventory management and transaction management. It also caters advanced requirements like managing multicity, multi office and multi team scenarios along with a sub broker network which provides pool of information about buyers and sellers.

Highlighting some of the key attributes of 'RealtoExpress', Anil Kumar Nirmal, Company's founder and CTO said, "This software not only protects data from thefts but you can even protect sensitive information of the data from your own employees."

He explained further, "While on one hand most of CRM doesn't provide extensive search and often fail to provide user friendly edge, on the other hand RealtoExpress has an omnipresent search option in each module and covers almost all the fields entered by the user, clearly making it a very user friendly software."

"RealtoExpress helps integrate any email account and SMS application programming interface (API). Apart from the transactional messaging, RealtoExpress has a unique featuring of using Email & SMS campaigning directly from the CRM. PDF proposals with costing and sample pictures can be easily generated for clients," elucidated Anupam Saha, Co-founder and Business Head, RealtoExpress.

"Furthermore, while using the software, pricing sheets are automatically generated once the basic information is filled. It can record number of transactions with individual identity," he said.

"RealtoExpress also helps in setting reminders for task allotments and time scheduling. Performance based reports can be generated anytime to evaluate the efficiency of the organisation with the software. Additionally it also provides quick analysis of all internal activities through graphical representation. All in all RealtoExpress is one time investment with a futuristic design which is promised to reap great results for its users," he concluded.

Facebook Hires Indians from IIT-A for Rs.60 Lakh/Annum. Ignores IIT

(<http://www.business2community.com/facebook/facebook-hires-indians-iit-rs-60-lakhannum-ignores-iit-0647469#zlj4yOFtDybs7W7B.99>)

This year's placement season has already brought some cheer to a few engineers and at the same time disappointed quite a lot. Last year's placement round saw Internet tech giants like Facebook and Google making big lucrative deals at the country's premier institute IIT but this year the companies have chosen candidates from Indian Institute of Information Technology, Allahabad (IIIT-A) instead.

[According to reports from TNN](#), two students from the final year BTech, IIIT-A have bagged lucrative job offers of Rs 60 lakh per annum from social networking giant Facebook, while another student has been chosen as student ambassador of search giant Google.

Revealing more about the placement, IIIT-A director M D Tiwari added that, *"Ankit Gupta and Yogesh Sharma, both final year students of BTech, have been recruited by Facebook while their batch mate Divanshu Garg has been chosen as the Google student ambassador to represent Indian Institute of Information Technology, Allahabad for the upcoming academic year."*

According to the director, IIIT-A has already witnessed 100 percent placement for the 2012-13 season with companies Microsoft, Walmart, Yahoo, Amazon, Facebook, Verizon, among others visiting the campus for recruitment. *"Hundred percent of BTech students have been placed by nearly dozen of companies with more than 70% of the students getting starting package of Rs 5.5 lakh per annum and the highest package ranging to Rs 60 lakh per annum,"* added the director.

Definitely it is a big news for IIIT-A but what is interesting to note here is that Facebook which made lucrative offers to students last year at IIT has [not even registered](#) for placements at any of the IITs. While there has been no slow down in companies visiting IITs considering the global slow down like 210 companies have registered at IIT-B this year but Facebook has decided to stay away.

In fact the most prized offer in last year's placement season was bagged by Uday Jalan, a student of BTech final at Motilal Nehru National Institute of Technology (MNNIT), Allahabad. He was hired by Facebook at a whopping pay package of Rs 1.33 crore per annum. At the same time another student from NIT, Suratkal was also recruited by Facebook at a pay package of around Rs 1 crore per annum.

The buzz that is doing the rounds in the IIT campuses on Facebook's behavior is that the social networking firm has fulfilled its entire requirement from last years recruitment and the decision to not hire is not restricted to Indian institutes. While Facebook has not commented on ignoring IITs it looks like the social networking giant is now looking for talent in the country apart from the big brands.

Read more at <http://www.business2community.com/facebook/facebook-hires-indians-iit-rs-60-lakhannum-ignores-iit-0647469#zlj4yOFtDybs7W7B.99>

HT Kolkata

French B-schools keen on India

PARIS: A premier business school of France could open its office in India essentially to recruit more students from India and establish better relationships with companies in India while a leading engineering school in France has plans to open an off-shore campus next year.

HEC Paris, a top business school in France, is open to the idea of opening an office in India. The institution offers a unique range of education programmes for students and leaders. "We want to open two offices in Asia and India should be one of them. The broader goal of having an international office will be to help companies in France establish better relations with their Indian counterparts. It will also help us recruit more students from India and give placement opportunities in India for our students," Prof Bernard Ramanantsoa, Dean of HEC Paris told HT. Ecole Centrale Paris, one of the oldest and a prestigious engineering schools in France has decided to set up a world class engineering college in India in collaboration with the Mahindra Group. To be named as Mahindra École Centrale (MEC) the new engineering college will be established in Hyderabad. While Ecole Centrale of Paris will provide academic hand-holding, the degrees will be provided by Hyderabad-based Jawaharlal Nehru Technological University (JNTU). **HTC**

October 17

HT Mumbai

Look beyond university rankings

STUDY ABROAD



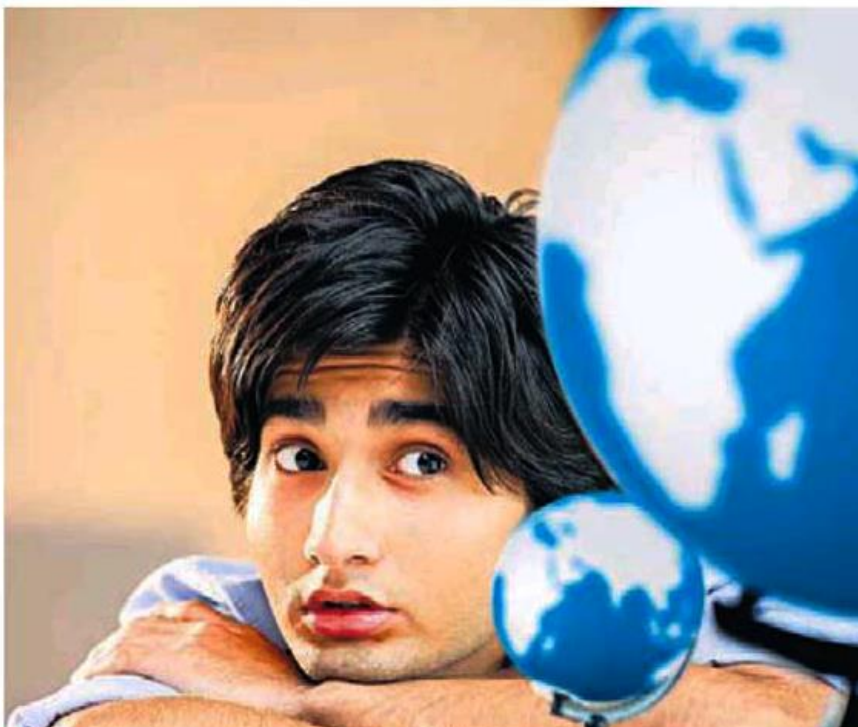
KIMBERLY DIXIT

A couple of weeks ago, the US News and World Report released their college rankings for 2014. Most of the media coverage of this dubious event has concluded that not much has changed, especially among the top 10 colleges. This is important to Indian students for whom US News is sometimes treated as a sacred text. Indian applicants' focus is so narrowed on the top 10 (maybe 20) ranked colleges that it's almost impossible to convince them to consider applying anywhere else.

This is often blamed on a 'status conscious' or 'brand-obsessed' perspective. While I think this tendency is exaggerated, I offer some reasons why even more supposed practical reasons for sticking with the top 20 are unfounded.

The most obvious reason for strict adherence to college rankings is understandable – education abroad is expensive and families want a solid return on their investment. A student should attend a college where her earning potential after college is the highest. But when it comes to jobs, the top colleges are not necessarily the darlings of industry.

In fact, in a recent column by Alison Singh, a US-based lawyer and writer, she cited a Wall Street Journal study in which recruiters were asked which colleges prepare students best for satisfying, well-paid jobs



■ In case of jobs, the top colleges are not necessarily the darlings of the industry. Many large public institutions also feature on the list of colleges that help students get satisfying, well-paid jobs.

IMAGESBAZAAR

with growth potential. Most of the colleges on the list were large public institutions and Cornell was the only US News top 20 college included (it should be noted that India's favourite non-top 20 made it to the list — Carnegie Mellon).

Besides return on investment, Indian applicants also believe it is important to study at top 20 ranked US News colleges, because it will ease their way into top graduate programmes such as Harvard Business School or Yale Law or Duke Medicine or Stanford

Engineering. But widely available data for these graduate programmes shows that they admit students with undergraduate degrees from a broad range of colleges.

In fact, if you compare rankings to rankings, Business Week's top 20 MBA feeder school rankings and US News's top 20 national universities have only 5 colleges in common (MIT, Penn, Wash U, Cornell, Notre Dame). It seems attending Boston College makes you more likely to end up in business school than if you go to

Harvard (according to these rankings). That is, obviously not to say that you cannot go to business school if you attend Harvard, rather that you are just as likely to attend a great business school if you attend a lower-ranked college.

Of course, I'm being hard on the applicants that are stuck on the top 20. But I don't mean to be, I mean to make the broader point that sticking to any list (even if it the top 100) is a mistake when it comes to applying to college, especially in the US. Every one of the over

EVERY ONE OF THE OVER 2,000 FOUR-YEAR COLLEGES IN THE US HAS A UNIQUE ETHOS, CULTURE AND MISSION. APPLICANTS SHOULD CHOOSE BASED ON WHETHER THESE FEATURES FIT WHAT THEY WANT

2,000 four-year colleges in the US is unique and has a special ethos, culture and mission. I wish that each applicant would choose their college based on where these features fit into they want from their college experience, rather than what they think (based on rankings) the college will do for them.

I have seen students go to Ivy League colleges and get very little out of it as they pined for home and longed to once again be a big fish in a small pond. And I have seen students go to The University of Richmond and take advantage of every opportunity presented to them, build their résumés through service and extracurricular learning and take hold of opportunities they could have never imagined. At the end of four years, whose résumé will impress a recruiter? It's not what you get out of college that makes you who you are after four years; it's what you put in.

The author is a study abroad advisor and co-founder of The Red Pen. Email your queries to hispicalprojects@hindustantimes.com

Robotic surgery is the future, say doctors

ADVANTAGE It has several edges over a laparoscopic surgery, foremost among them being the precision with which the operation can be carried out

Suruchi Tulsyan

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Sixty-eight-year old Abhishek Chatterjee, suffering from cancer of the kidney, underwent a partial robotic nephrectomy surgery at Apollo nine months ago. The surgery, which removed the tumour from his kidneys, lasted for 90 minutes; Chatterjee stayed in the hospital for three days and was back to his workstation in a week's time.

According to Dr Vinay Mahendra, senior consultant urologist at Apollo Gleneagles who conducted the operation, had this patient opted for laparoscopic surgery instead of robotic, the chances of him losing the kidney would have been higher.

"Robot plays a key role in removing the kidney cancer and saving the unaffected part of the kidney. Modern instruments used in this surgery helps in clearing the cancer properly," said Mahendra about robotic surgery, which was introduced in the hospital about two years ago.

Prof Anup Kundu, head of urology department, IPGMER, SSKM, says that at present, there is only one robotic surgery machine in Kolkata at Apollo; while Delhi has four such robots - including one at AIIMS and Mumbai has seven of these.

"A robotic surgery is nothing but an extension of laparoscopic surgery. The only downside of this surgery is that it is very costly, making the treatment hard on the pocket for many, and out of reach for the poor," says Kundu.

At present, in Kolkata, robotic surgeries are being conducted in the field of gynaecology and urology - especially in treating radical prostate cancer, early stages of kidney cancer, cancer in urinary bladder and complex obstruction in kidney (hydronephrosis).

A robotic surgery, claims Mahendra, has several edges over a laparoscopic surgery, foremost among them being the precision with which the operation can be carried out.

Like a laparoscopic surgery, keyholes are made in the abdomen in a robotic surgery and robotic instruments kept inside. This is connected to a robotic tower, which in turn is connected to a robotic master console. This is kept in a section of the operation theatre or outside it, where the surgeon sits and controls the camera and instruments.

"The computer console gives real time 3D high-definition image of the abdomen against the 2D image in laparoscopy. While the image is magnified two to four times in a laparoscopic operation, in robotic, it is magnified 15 times. Thus, one can see a lot better, facilitating the surgery," said Mahendra.

The manoeuvrability of instruments is much more in the robotic surgery, making it easier to reach inside the body and function. Plus, the inadvertent human errors - caused due to shaking hands and like movements due to fatigue, etc - are not at all important factors in robotic surgery. Robot has in-built safety measures.

"A patient's recovery is proportional to the quality of surgery. If the surgery has been done efficiently, then the patient heals and can return to normal life much faster," added Mahendra.

"In a robotic hand,



A BRIEF IDEA ABOUT THE SURGERY

It is an advanced type of laparoscopic surgery, done by placing robotic instruments inside the abdomen of patients. The instruments are connected to a master console operated by a surgeon. The surgeon sits and controls the camera and instruments on the patient. The robot mimics the movements made by the surgeon at the console.

ADVANTAGES: Provides high definition 3D images of the affected area to the surgeon. Surgery is more minutely done. Better technology helps get better riddance from cancer. Manoeuvrability of instruments is 360 degree, not possible in human hands. Absence

of inadvertent human errors cause by fatigue and tremors of hands. Under experienced hands, robotic surgery takes lesser time than open and laparoscopic surgeries. Recovery is faster, hospital stay shorter.

USED TO TREAT: Gynaecological and urological problems. In the latter, problems addressed are early prostate cancer, early kidney cancer, urinary bladder cancer, complex obstructions of kidney.

DISADVANTAGES: It is not very pocket-friendly. Treatment of early prostate cancer and removal of cancer from kidney can cost about ₹2.5 lakh.

all sides - 360 degrees - are made possible. But in a human hand, the degree of freedom of movement is restricted," said Tamas Chowdhuri, secretary of Association of Minimal Access Surgeons of India.

Treating the prostate cancer by laparoscopic surgery is extremely difficult, with the gland being placed in pelvis. "The robotic surgery makes it easier to conduct this without any tremors of hand," added Chowdhuri.

According to him, apart from the precision involved, there is no other difference between laparoscopic and robotic surgery. "Theoretically, it requires the same time to heal and other things. But, one should use this surgery if available, as it is better technology."

Whether one can undergo a robotic surgery or not depends more on the disease than the age of the patient, said Mahendra.

"People of all ages can undergo robotic surgery after a complete fitness evaluation. Two years back, when we started the robotic surgery, it took a lot

the benefits of this otherwise costly but effective surgery. Today, the scene is better; but a lot more patient education about technology is needed," said Mahendra.

Mahendra cited the case of a woman in her mid-20s, who underwent a robotic surgery for removal of obstruction in the kidney. "It took us 80 minutes to do this surgery - half the time it would have taken by a laparoscopic procedure. Plus, the long-term results in a laparoscopic surgery would have been 10-15% inferior," said Mahendra.

The only downside of the surgery is its cost, say experts. "The cost of a robotic machine is about ₹10 crore. Plus, per surgery, instruments worth ₹30,000-₹40,000 are used and disposed of. This makes the surgery very costly," said Chowdhuri.

ut the more surgeries are conducted by a machine, the lower the cost borne per patient. At present, a robotic surgery costs 20% more than a laparoscopic surgery. And doctors say robotic surgery is the future.

AT HAND

Gleneagles:
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Dr Kundu:
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Dr Chowdhuri:
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HT New Delhi

INDIA URGED TO CHAMPION SCOTTISH HIGHER EDUCATION

NEW DELHI: Scottish external affairs minister Humza Yousaf has urged almost 70 of India's most prominent alumni to become advocates for Scotland and its unique higher education system. At an event in New Delhi last week, Yousaf asked Indian alumni of Scottish universities, major employers from both India and Scotland, and representatives of Scottish higher education to unite in a drive to promote the distinctive benefits of living, working and studying in Scotland. Today's event aimed to showcase the distinct quality of Scottish higher education and encourage more Indians to choose Scotland as a place to live, work and visit.

in the news

ELEANOR CATTON

Kiwi author becomes youngest to win Man Booker Prize



- 1 The 28-year-old author, who was presented prize by The Duchess of Cornwall, won it for 'The Luminaries'
- 2 Catton said that the shape and the form of the book made certain kinds of editorial suggestions both mathematically and astrologically impossible.
- 3 She has found a place among literary greats such as Salman Rushdie, Margaret Atwood and Kingsley Amis with her win.
- 4 Catton's publisher Fergus Barrowman of Victoria University Press praised the Booker judges' vision in selecting the 848-page door stopper, the longest novel to ever win the prize.

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First comp programmer inspires women in tech

Claire Cainmiller

In 1842, Ada Lovelace, known as the “enchantress of numbers,” wrote the first computer program.

Fast-forward 171 years to October 15 (which happened to be Ada Lovelace Day, for highlighting women in science, technology, engineering and math), and computer programming is dominated by men. Women software developers earn 80% of what men with the same jobs earn. Just 18% of computer science degrees are awarded to women, down from 37% in 1985. Fewer than 5% of venture-backed tech start-ups are founded by women.

Those statistics, released by Symantec, the security company, and the Anita Borg Institute, which works to recruit and promote women in tech, provide context for recent debates in Silicon Valley like why Twitter has no women on its board.

Given that girls begin to shy away from computer science when they are young, because of a lack of role mod-



ROLE MODEL: Ada Lovelace, the daughter of Lord Byron, wrote the first computer program in 1842

els and encouragement from parents and teachers, perhaps a short history lesson on Lovelace would be helpful.

She was the daughter of Lord Byron, the poet, who split from her mother shortly after her birth. Her mother

encouraged her to pursue math to counter her father’s “dangerous poetic tendencies,” according to the University of California, San Diego.

Meanwhile, in Silicon Valley, some people sense change in the air. “There’s a lot more focus than we’ve seen in the past, and a lot more hard conversations,” said Telle Whitney, chief executive of the Anita Borg Institute. The Symantec and Anita Borg report tried to find a bright side — the wage gap is smaller in technology and engineering than it is in other fields, and the job opportunities are many.

Astia, which offers programs for women tech entrepreneurs, announced on Tuesday a partnership with Google to expand its lunch series for introducing women founders to investors. And two scientists, sponsored by Brown University, are hosting a mass Wikipedia editing session for people to create and expand upon entries for women in science and technology. NYTNEWSERVICE