

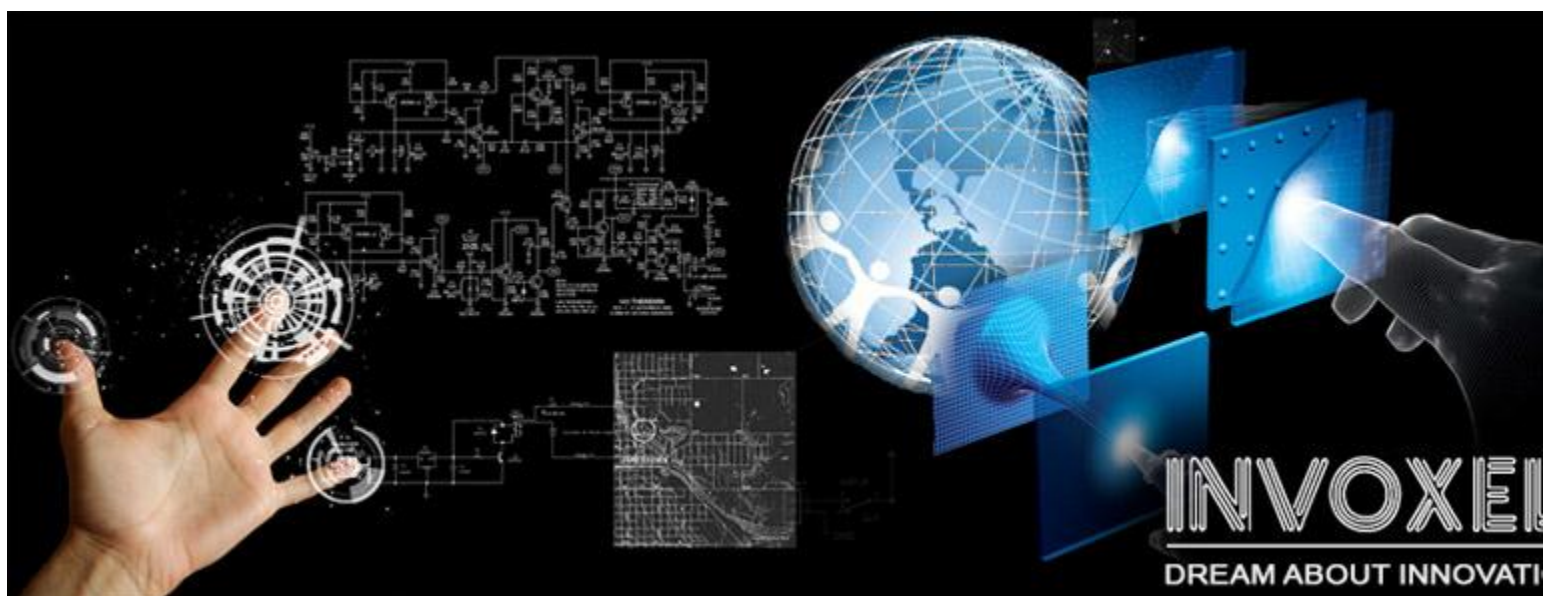
## Newspaper Clips February 25, 2015

### **IIT Delhi alumnus starts INVOXEL to innovate around smart interaction**

<http://yourstory.com/2015/02/invoxel/>

Technological innovation is indeed important for economic growth and the enhancement of human possibilities. Driven by extremely young, diverse and inclusive entrepreneurs, the Indian startup ecosystem is rapidly evolving. One such innovation driven technological startup is **Invoxel**.

Who says every entrepreneur story starts with the dream of making money? Some might even start with the humble thought of making life simpler; as it did for IIT Delhi alumnus Sachidanand Swami.



It was at a tea table discussion with a friend on SCI FI products that Swami came up with the idea of smart surface, but there was still a long way to go. During his tenure at Denmark Technical University, he started connecting with various resources and made up his mind that he would come up with a prototype. He turned to India and turned up at the doorstep of an IIT Delhi professor. The professor agreed to keep him as a summer intern.

Swami's startup **Invoxel** is an amalgamation of hardware and software technology to design and develop a multi user smart surface. Team Invoxel includes **Chirag Gupta** from the Indian Statistical Institute (ISI), Kolkata, and **Mukesh Kumar** from the Department of Computer Science, IIT Delhi. The three are avid travellers and shutterbugs.

Their very first achievement was winning the first prize at the Open house at IIT Delhi and TechFest IIT Bombay. This was followed by Grant from DST and then the laurels followed. They also won the *Power of Idea* (Centre for Innovation and Entrepreneurship, IIM Ahmedabad -2012) and the *AGM Innovation Award* (IIT Delhi – 2012) in India; abroad they walked away with the *Innovators Award* (Russian Union of Youth, Chita, Russia-July 2014) and the *Top 100 Innovators Award* (Open Innovation Forum, Moscow, Russia – Oct 2014). The latest feather in their cap is the Top 6 Innovators Award (Alumni Day IIT Delhi, 2014).



Team Invoxel receiving Top 6 Innovators Award at Alumni Day IIT Delhi, 2014

Now they have started being noticed

Invoxel brought home the prestigious grant of Technopreneur Promotion Programme (TePP) by the Department of Science and Technology (DST) in 2013. This propelled the prototyping and shaping of as an innovating product. The first product sale worked as an investment and provided for mentoring. It then sold its first stage beta products and paved the path to various segments and clients like Oil India, Petronet LNG and Protiviti.

One of their first clients was AUDI India. The company was looking for smart surface installation for their Q3 Vendor Meet and team Invoxel made a prototype in two days and installed four units of the first stage product at a venue in Gurgaon. This gave them a burst of confidence and they took up Spark Minda Group project which is their first product installation.

Today, Invoxel is a pioneer in **bridging digital communication gaps which it does by** offering interactive solutions on digital **multi-user smart surfaces technology**. Its expertise is providing multi user interactive smart surfaces to groups of users. Invoxel Smart Surface is integration of hardware technologies and touch inputs through the smart glass surface. Multiple users can **work simultaneously** on smart surface table for intuitive interaction to **make collaborative group communication**. It has the capability to capture attention of users and they can ideate together. Invoxel's **digital landscaping** is a tool for impressive corporate representation.

The team's vision is to expand and provide technological sustenance to corporate houses, in the field of education, hospitality, the entertainment industry, tourism, infrastructure and real estate by using smart surfaces technologies.

Swami proudly shares, "It was indeed a challenging mile stone which we achieved when we completed our project with Spark Minda Group, an esteemed company in automobile component manufacturing. Team Invoxel was guided and led by Chairman Ashok Minda while support was provided by his management team to achieve the desired results. Team Invoxel took up this challenge with a lot of determination and worked towards this wonderful opportunity. This happens to be our stepping stone to such opportunities globally."



Invoxel Product at Spark Minda, Ashok Minda Group, Gurgaon

Spark Minda Group is utilizing Invoxel's multi user smart surface for interacting and showcasing business setups, branding and futuristic discussions with their stakeholders. Invoxel's multi user smart surface **contains Spark Minda Group's company landscaping** along with video representation of Ashok Minda, Group Chairman. Invoxel's smart surface product is able to give the opportunity to groups of users to look into Minda Groups Company's representation on global maps simultaneously and deep down into the information about their business with respect to customer's base, size of operation, manufactured products, quality certificates and futuristic plans.

Swami adds, "Successful project implementation at Spark Minda Group gave strength, confidence and vision to entire team. Team Invoxel with their 'never say die' attitude has put up their best to take their startup ahead. Without support from team it would have been very difficult for Invoxel to achieve its first long interactive smart surface."

Invoxel is open to technology product visionaries, advisories, investors and supporters to join the band wagon. Their belief is, “Innovation doesn’t come just from giving people incentives; it comes from creating environments where their ideas can connect and grow into reality.

## आईआईटी एडमिनिस्ट्रेशन की मदद से पकड़े गए प्रो. गजभिय

KANPUR: टीचर्स भर्ती घोटाले में गिरफ्तार आईआईटी के प्रोफेसर एनएसएस गजभिये की तलाश लंबे समय से कर रही थी लेकिन वो हाथ नहीं लग रहे थे. सीबीआई को यह सफलता तब लगी जब उसने आईआईटी प्रशासन का सहयोग लिया. कैंपस सूत्रों से मिली जानकारी के अनुसार प्रोफेसर की अरेस्टिंग के मामले में आईआईटी प्रशासन ने अहम भूमिका निभाई है. एडमिनिस्ट्रेशन ने दोनों पक्षों से संपर्क कर मामले का हल निकालने को कहा और हर संभव सहयोग देने का आश्वासन भी दिया. यही वजह है कि अरेस्टिंग के पहले सीबीआई ने इंस्टीट्यूट प्रशासन को पूरे प्लान की जानकारी फैक्स के माध्यम से दे दी थी.

आवास पर छाया सन्नाटा

प्रो. एनएस गजभिये पर साल खूब में डॉ. हरि सिंह गौर यूनिवर्सिटी के वीसी रहते हुए फैकल्टी के रिक्रूटमेंट में भारी अनियमितताओं का आरोप है. मामले की जांच सीबीआई ने इयर खूब में शुरू कर दी थी. एक साल से सीबीआई लगातार प्रो. गजभिये की तलाश में आईआईटी कैंपस के चक्कर काट रही थी. सोमवार की शाम को सीबीआई की टीम ने प्रो. गजभिये को कैंपस से अरेस्ट कर लिया. सीबीआई की टीम उन्हें अपने साथ भोपाल ले गई है. इसके बाद से ही कैंपस स्थित गजभिये के आवास पर सन्नाटा पसरा हुआ है. उनके शुभचिंतक आगे की रणनीति पर विधिक सलाह ले रहे हैं.

## **CBI arrests ex VC of Sagar varsity from IIT-Kanpur**

<http://timesofindia.indiatimes.com/city/bhopal/CBI-arrests-ex-VC-of-Sagar-varsity-from-IIT-Kanpur/articleshow/46351108.cms>

BHOPAL: Anti-corruption wing of CBI's Jabalpur branch on Monday arrested senior professor of IIT-Kanpur and former vice-chancellor of Dr Hari Singh Gour Central University, Sagar, Dr N S Gajbhiye in connection with seven different cases of irregularities registered against him.

He was arrested from chemistry department of IIT, Kanpur in presence of dean of faculty affairs, IIT, Kanpur.

CBI sources said a copy of Gajbhiye's arrest memo was given to his wife and intimation regarding arrest was given to local Kalyanpur police station of Kanpur and head of department, chemistry department, IIT, Kanpur. His medical checkup was done at Government Hospital, Kanpur.

He is being brought to Jabalpur by train by a six member CBI team comprising of three officers. He will be produced before CBI Court of Special Judge, Jabalpur on Tuesday.

After registration of new cases against him, searches were conducted at Gajbhiye's residential premises at IIT campus, Kanpur on February 2. Gajbhiye was not available during the search and was reportedly at Mumbai in connection with recruitment of teaching faculty of Mumbai University. On being contacted over telephone by the agency and requested to join CBI for legal proceedings at his house urgently, he told the agency that he will return to Kanpur only on February 22, after selection committee meeting of University of Mumbai and his appointment with a doctor at Mumbai.

Thereafter, he switched off his mobile.

CBI officials claimed, Gajbhiye and other officers of Sagar University accused in the case, entered into a criminal conspiracy for recruiting S M Mahendra Simha Karna and Vandana Vinayak as assistant professors in the department of Forensic Science and Criminology of Sagar University, notwithstanding their ineligibility. Several other recruitments carried out by Gajbhiye at the university are under scanner.

There are four investigating officers (IOs) in seven cases being probed against him, said sources, adding, he had been asked to appear on January 19, 20, 21 and 22 but to no avail. He had ignored repeated notices served on him by CBI. A week ago, he wrote to the probe agency urging it to interrogate him within the campus of IIT-K, and that too in presence of a doctor, else mail him the questions the agency wanted answers to.

Gajbhiye had been trying to convince the agency he is suffering from coronary problems and it would be difficult for him to visit Madhya Pradesh for 'interrogations' over and again.

CBI had given him an ultimatum to appear before CBI office by Monday failing which the agency took him into custody. During its third reminder, CBI had also written to the HRD ministry to urging that his salary be withheld.

Gajbhiye was working as a professor in IIT-Kanpur before his appointment as first VC of HS Gour university after it was declared a central university in 2009.

His services were repatriated to IIT-Kanpur after completion of five-year term.

## **HAL Chair at IIT-M in 3 months**

Hindustan Times (Kolkata)

An exclusive chair for Hindustan Aeronautics Limited (HAL), to be set up within three months in IIT Madras, will be responsible for carrying out research in various areas related to aerospace technologies, providing technical consultancy, facilitating training programmes and addressing any other mutually agreed activities relevant to HAL.

“Through the chair, MTech and PhD programmes may be organised through external registration and all subjects taught through online method. HAL officers deputed for these courses are required to come to IIT Madras only for laboratory classes. Final examinations may also be conducted at HAL under the supervision of an authorised officer of HAL,” says Professor R Nagarajan, dean (international and alumni relations), IIT Madras. Similarly, specialised short-term courses may also be conducted for HAL officers through the chair, he added.

HT.COM ND 25.02.2015 P-6

# DUTA alleges irregularities in DU official appointments

Gauri Kohli

Delhi University Teachers' Association (DUTA) has alleged several irregularities in the appointment of officiating principals, vice principals and OSDs.

As per an allegation, in November 2013, the principal was appointed in one college on the basis of the old Ordinance (which did not have a term post but a tenure till retirement), in violation of UGC regulations. "Ordinance XVIII of DU states that in the absence of

a principal, either the vice principal will officiate or if a college does not have a vice principal, then the senior-most teacher will officiate as principal," says Nandita Narain, president, DUTA.

As per the rules, any vice principal or officiating principal must have the same qualifications as principal viz 15 years' teaching experience and a PhD. "Most colleges had a healthy practice of appointing vice principals by rotation on the basis of seniority. However, the current DU admin-

istration has been replacing this with a system of handpicked vice principals who often do not even satisfy the basic qualifications laid down in the Ordinances. This is happening particularly in colleges coming under the Delhi government, where in the absence of a regular governing body of 15 members, a quorum of five members dominated by DU representatives is functioning," Narain adds.

Narain also cited several examples: "In Aurobindo College, the regular vice princi-

pal was removed halfway through her tenure and replaced with a handpicked vice principal who is now officiating as principal. In a college in northwest Delhi, in violation of long-standing norms, a person who does not satisfy the basic qualifications was appointed as vice principal. Kirori Mal College appointed a vice principal who has been officiating as principal since the regular principal was suspended. The officiating principal continues despite facing a criminal investigation," Narain said.

Hindustan Times ND 25/02/2015 P-14

# Education-industry interface key to skills project

Vineeta Sirohi

Skill development remained quite marginalised in the past and India is still adrift of the national goal of tracking 25% of the secondary students under the vocational stream. The present enrolment is only about 5%. The NDA has envisaged a target of skilling 500 million people by 2022. However, the latest NSSO (2009-10) figures are shocking for the proportion of persons who had vocational training in the age group 15-59 years — only 2% for formal and 5% for non-formal vocational training, leaving a large residue without any vocational training. India is privileged to have the youngest working population and by 2020 it would be the youngest nation with 29 years as the average age of an Indian, much lower than other countries like China and the US with 37 years and Japan with 48 years. Moreover, it is also estimated that

between 2010 and 2030, India would have an edge over other countries due to its demographic bulge. In this context, it calls for a serious attention towards skilling people and enhancing their employability.

A major issue in skill development is the mismatch between the supply and demand of skills. Skills need to be integrated into the education curriculum. Further, to address the issue of skills mismatch, there is need to build on education-industry interface and there needs to be continuous updating of these programmes.

The demographic changes in the population and the changing nature of the world of work call for a paradigm shift in the skill development policy. Considering its unique mandate to equip people with knowledge and skills for the world of work, it is imperative that the skill development policy be drawn from a comprehensive skills information base. However, we do not

have an adequate skills information system and this issue needs to be addressed. The existing labour market information system becomes redundant in the present context for being more inclined towards quantitative parameters that may not suffice for information required to provide a reference point and for formulating programmes for skill development.

There is need to bridge the gap between quantitative and qualitative data and surveys need to be more frequent and regular to capture the dynamism of the labour market and monitor interim fluctuations. It is also essential to carry out tracer studies of the vocational pass outs both at micro and macro level in order to gauge the effectiveness of the existing programmes.

*Vineeta Sirohi is associate professor, National University of Educational Planning & Administration, New Delhi*  
The views expressed by the author are personal

# Mind-controlled bionics help 3 men take control

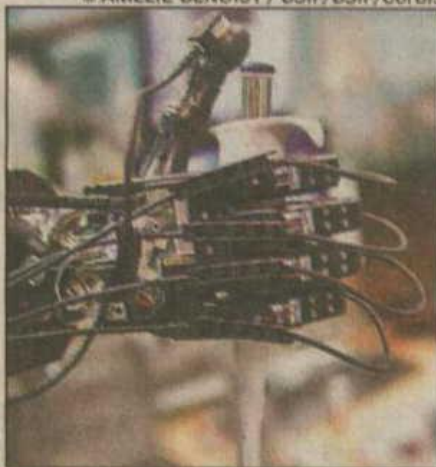
**Kounteya.Sinha**  
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**London:** In a first, three Austrian men have undergone a new procedure called "bionic reconstruction", enabling each of them to use a robotic prosthetic hand controlled by the mind. The British Medical Journal Lancet will announce the breakthrough on Wednesday.

The technique was developed by Oskar Aszmann, director of the Christian Doppler Laboratory for Restoration of Extremity Function at the Medical University of Vienna, along with engineers from the department of neuro-rehabilitation engineering of the University Medical Centre, Goettingen.

The technique combines selective nerve and muscle transfers, elective amputation and replacement with an advanced robotic prosthesis (using sensors that respond to electrical impulses in the muscles). Following comprehensive rehabilitation, the

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## TECH-ABLED

technique restored a high level of function in all three recipients aiding in activities of daily living.

All three men are now able to accomplish various everyday tasks such as picking up a ball, pouring water from a jug, using a key, cutting food with a knife or using two hands to undo buttons.

They suffered for many years with brachial plexus injuries and poor hand function as a result of motor vehicle and climbing accidents.

The brachial plexus is a network of nerves that originates

in the neck region and branch off to form most of the other nerves that control movement and sensation in the upper limbs including the shoulder, arm, forearm and hand.

"In effect, brachial plexus avulsion injuries represent an inner amputation, irreversibly separating the hand from neural control. Existing surgical techniques for such injuries are crude and ineffective and result in poor hand function," Aszmann said.

"The scientific advance here was that we were able to create and extract new neural signals via nerve transfers amplified by muscle transplantation. These signals were then decoded and translated into solid mechatronic hand function," he added.

All three patients spent an average of nine months undergoing cognitive training, firstly to activate the muscles and then to use the electrical signals to control a virtual hand.

*For the full report, log on to [www.timesofindia.com](http://www.timesofindia.com)*



## An A+ candidate from a B+ institute?

*'The more reputed the institute, higher the pay' is the philosophy. Does this mean that a highly competent student from a lesser reputed institute has to pay the price?*

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When it comes to deciding salary slabs for employees, organisations have a set of rules and regulations to follow. The industry trend has been to hire and subsequently pay different salaries for similarly qualified students but this is creating/likely to create problems if the nature of work is not segregated or is different between candidates hired from different colleges. Should companies have different slabs of salaries for employees from different colleges?

At the entry level, companies generally tend to have different salaries for employees from different colleges, asserts Harpreet Grover, co-founder and CEO of

CoCubes. He says, "Most companies historically have followed this policy. This was primarily driven by the fact that there was no other quality benchmark for shortlisting and hence, colleges served as the filter, i.e. someone who went to NIT/IIT was a good candidate to begin with. Today, there are great assessment tools available, which are easy to implement, but the inertia of the older thought process is still prevalent." According to Mona Cheriyan, COO & head human resources, Thomas Cook (India) Ltd, "Usually, the grading of the institutes is done on the basis of the quality of students, the past history of performance of employees recruited from that institute, quality of projects,

faculty, specialisations, etc. However, during the lateral hiring process when the experience profile is more than five years, most organisations give a higher weightage to the quality of experience and less to the 'institute'."

Nitinchandra Shende, sr GM (HR) - head (talent management), Persistent Systems points out that salary variations based on a candidate's educational institute depend upon individual company policies. "So, companies that value the academic foundation of their employees are quite likely to do this differentiation. On the other hand, companies, which give more

weightage to demonstrable experience than academics are likely to avoid this differentiation," he shares. This obviously puts the HR heads in a dilemma while hiring. So, how do they decide and be fair? HR heads today can rely on available new-age measurement tools to set a benchmark of quality, suggests Grover. "Companies could still have different salaries if the roles are significantly different; for example, R&D v/s plant floor, development v/s testing. But, rather than having college-assigned to roles, different salaries are assigned and candidates are hired on meritocracy," he says.

According to Ronesh Puri, MD, Executive Access, "Candidates from a B-level institute may be better than a worse candidate of an A-level institute. Therefore, not always do candidates from the same college have the same skill-sets. Yes, a lot of companies do have variants in the salary bands, but most of them have clubbed the variants for a fairer decision. HR must ensure that it also takes into account the potential of the student."

Hence, a 'work-to-salary' approach as opposed to a 'college-to-salary' one is certainly the way forward.



IMAGESRAZAR

# Building a face, and a case, on DNA

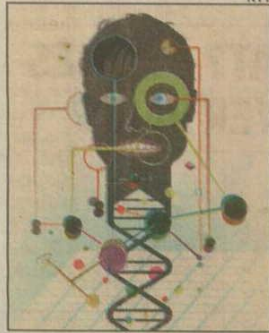
## In A First, US Cops Use Genetics To Prepare Sketch Of Unknown Suspect

Andrew Pollack

There were no known eyewitnesses to the murder of a young woman and her 3-year-old daughter four years ago. No security cameras caught a figure coming or going.

Nonetheless, the police in Columbia, South Carolina, last month released a sketch of a possible suspect. Rather than an artist's rendering based on witness descriptions, the face was generated by a computer relying solely on DNA found at the scene of the crime.

It may be the first time a suspect's face has been put before the public in this way, but it will not be the last. Investigators are increasingly able to determine the physical characteristics of crime suspects from the DNA they leave behind, providing what



The ability to determine physical characteristics from genetics could become a powerful tool for the police but it also raises questions of rights and profiling

could become a powerful new tool for law enforcement.

Already genetic sleuths can determine a suspect's eye and hair color fairly accurately. It is also possible, or might soon be, to predict

skin color, freckling, baldness, hair curliness, tooth shape and age.

Computers may eventually be able to match faces generated from DNA to those in a database of mug shots. Even if it does not immediately find the culprit, the genetic witness, so to speak, can be useful, researchers say.

"That at least narrows down the suspects," said Susan Walsh, an assistant professor of biology at Indiana University-Purdue University Indianapolis who recently won a \$1.1 million grant from the Department of Justice to develop such tools.

But forensic DNA phenotyping, as it is called, is also raising concerns. Some scientists question the accuracy of the technology, especially its ability to recreate facial images. Others say use of these techniques could ex-

acerbate racial profiling among law enforcement agencies and infringe on privacy.

"This is another of these areas where the technology is ahead of the popular debate and discussion," said Erin Murphy, a professor of law at New York University.

DNA, of course, has been used for more than two decades to hunt for suspects or to convict or exonerate people. But until now, that meant matching a suspect's DNA to that found at the crime scene, or trying to find a match in a government database.

DNA phenotyping is different: an attempt to determine physical traits from genetic material left at the scene when no match is found in the conventional way. Though the science is still evolving, small companies like Parabon NanoLabs,

which made the image in the South Carolina case, and Identitas have begun offering DNA phenotyping services to law enforcement agencies.

Illumina, the largest manufacturer of DNA sequencers, has just introduced a forensics product that can be used to predict some traits as well as to perform conventional DNA profiling.

The Toronto Police Service has submitted DNA from 29 cases dating from the early 1980s through 2014 to Identitas. In 10 instances, the quality of the sample was too poor for any analysis to be done.

In a number of cases, "it's enabled us to actually change the direction we were focused on originally," said detective sergeant Stacy Gallant, a cold-case homicide investigator. But there have been no arrests or convictions as a result, he said. NYT/NEW SERVICE