

Times Of India ND 19/03/2012 P-19

## The way you type will be your PC's password

US Defence Dept Working On Tech That Allows You To Log In Straightaway, Bypassing Secret Code

#### **Randail Stross**

- magine sitting down at your work keyboard, typing in your user name and starting work right away — no password needed. That's a vision that the Defence Advanced Research Projects Agency, part of the defence department, wants to turn into a reality. It will distribute research funds to develop software that determines, just by the way you type, that you are indeed the person you say you are.

Darpa's purpose is to sponsor "revolutionary, high-payoff research" for military use. But technology developed under Darpa's auspices — the internet itself being only one among many achievements traceable to its initiatives—eventually tends to find its way into the civilian world. Passwords like

"6tFcVbNh^TfCvBn" meet the defence department's definition of "strong," says Richard Guido rizzi, a program manager at Dar pa. "The problem is, they don't meet human requirements," he says. "Humans aren't built to understand random connections of characters."

Guidorizzi made those com-ments in a talk titled "Beyond Passwords," presented last No-vember at a Darpa symposium in Arlington, Virginia. Humans use patterns to make passwords manageable, he said

He displayed five handwritten passwords, each a slight vari-ation of "Jane123" — and all of them easily cracked. "What I'd like to do," Guido

rizzi said, "is move to a world where you sit down at a console, you identify yourself, and you just start working, and the au-



thentication happens in the background, invisible to you, while you continue to do your work without interruptions."

No biometric sensors, like thumbprint or iris scanners, would be used. Instead, he is seeking technology that relies

behavioural characteristics. which he calls the cognitive fingerprint. Experts are trying several approaches to determine us-ers' identities solely through their computer behaviour.

Roy Maxion, a research professor of computer science at Carnegie Mellon University, oversees research on "keystroke dynamics," including the length of time a user holds down a given key and moves from one particu-lar key to another. Motions that performed countless we've times, professor Maxion says, are governed by motor control, not deliberate thought. "That is why successfully mimicking keystroke dynamics is physio-logically improbable," he says.

He gives this example: A com-puter user holds down a key for an average of 100 milliseconds.

solely on an individual's distinct Suppose that a fraudster is trying to mimic a person who is slightly faster than average — typically holding the key down for 90 milliseconds. "Then the spoofer is in the du-

bious position of having to con-sciously shorten a key-press action by 10 milliseconds," professor Maxion says. Having such control doesn't seem realis tic, he says, when one considers . that "a voluntary eye-blink takes" 275 milliseconds." He says that there is some evidence that a user's emotional state affects typ ing rhythms. But just as people can recognize a familiar song even if it is mangled, so, too, he hypothesizes, could software recognize one's distinct "core rhythm," which would be "per-ceptible even through noise of t emotion, fatigue or intoxication." NYTNEWSSERVICE

#### HindustanTimes Title : Tata Steel, Wipro among world's most ethical: survey Author : Location : MUMBAI:

Article Date : 03/19/2012

#### Tata Steel, Wipro among world's most ethical: survey

MUMBAI: Tata Steel and Wipro have been named among the world's most ethical companies by the American think tank, Ethisphere Institute, company officials said. These are the only two Indian companies to have featured in the 2012 list of World's Most Ethical Companies prepared by **US-based** Ethisphere Institute. Ethisphere evaluated about 5,000 global companies, including those in S&P's 500 index, on reputation, corporate citizenship, culture. IANS

#### FINANCIAL EXPRESS ND 19/03/2012 P-6

# An equitable Budget

### The overall impact of the Budget on the education sector has been quite neutral



Amitabh Jhingan Partner, Ernst & Young India

HE finance minister in this year's Budget speech minced no words while saying: "I know that mere words are not enough. What we need is a credible roadmap backed by a set of implementable proposals to meet those objectives". Like in recent years, much was expected from the Budget, in terms of detailing a clear roadmap for implementation of the reform process initiated by the MHRD, supported by adequate budgetary allocations. The Budget, however, did not make any big bang announcements and, overall, the impact of the Budget on the education sector has been quite neutral.

The customary allocations, however, have seen reasonable increase in allocations. The plan budgetary allocation for the sector, ₹61,407 crore, has

+ witnessed an 18% increase over the previous year of ₹52,057. This allocation includes ₹25,555 crore for the implementation of the Right to Education Act, 2009, a flagship UPA programme that promises free and compulsory education for all children in India from Class 1-8. However, there have been implementation hurdles, particularly on fund sharing between the central and state governments. The increasing primary enrolments would mean the need for higher capacity in secondary and higher education. In the context of secondary education, the Rashtriya Madhyamik Shiksha Abhiyan, launched in



the year 2009 with the objective of enhancing access to secondary education and improving its quality, has secured a ₹3,124 crore allocation, witnessing an increase of 29% from last year. The much-hyped reform

rice induring pear reform process, through the introduction of new legislation initiated by the MHRD, seems to be going slow, with budgetary allocations of just ₹2 crore set aside for the establishment of Education Tribunals, Accreditation Authority and the National Commission for Higher Education and Research; this may hamper the speed of the reform process. Another aspect that could have been addressed was the issue of quality through some specific budgetary outlays and, more importantly, specific outcomes that should be achieved on quality.

The budgetary allocation for higher education witnessed an impressive 18% increase to ₹15,438 crore this year. Much progress is expected in the higher education sector, especially in light of the 30% gross enrolment ratio targeted by the year 2020 and a host of regulatory reforms proposed by the government. From a student standpoint,

two key schemes indicate very positive news. First, the government had earlier introduced the Educational Loan Interest Subsidy Scheme, implemented through the Indian Bank Association, to provide subsidies on the interest on loan borrowed from banks by students lacking resources, for which a sum of ₹800 crore has been allocated. Second, the much-desired Credit **Guarantee Fund for Education Loans** offered by banks has been introduced by the government. It is expected that this Fund would guarantee certain education loans provided by banks to meritorious students without/with minimal collateral or guarantee from students or parents. This initiative would go a long way in ensuring that banks disburse education loans to poor and meritorious students and increase access to higher education. This has been an ask of the industry for many years now and the government has delivered.

From a direct tax perspective, the finance minister has introduced Section 35CCD into the Income-tax Act. 1961. This provision seeks to provide a company a weighted deduction of 150% of its expenditure (not being in the nature of cost of land or building) on any skill development project notified by the board, in accordance with prescribed guidelines. This move may prove to be one of the many initiatives to propel skill development and vocational education in the country. Involving the private sector here and providing tax sops is one of the key measures to improve the quality of education and skills in India.

A landmark proposal for taxation of all services other than those specified in a negative list has been introduced by the finance minister, replacing the 18-year-old service tax law. The negative list on service tax law. The negative list on service tax includes preschool, school education, recognised education at higher levels and approved vocational education courses, which practically would continue the service tax position on recognised education services under the existing service tax law.

The education sector being characterised by archaic regulations has, over the past few years, been promised landmark regulatory reform. The initiative demonstrated by the government in the introduction of legislation in Parliament has been found lacking in implementation. Sans the RTE, the recent reforms of the government are yet to see the light of the day. Given this, it is hoped that the gift of a young country and a huge demographic advantage is well-capitalised through planned reform and meticulous implementation of proposals.

## Plant that makes biodiesel using waste material at IIT-B

19 Mar 2012, Hindustan Times (Mumbai)

MUMBAI: Last month, after four years of labour, the biosynth — a plant created by IIT-B students — produced its 150 litres of its first quantum of biodiesel made from waste edible oil.



Students and

faculty at IIT-B in Powai who are involved in the project.

The plant, tucked away behind the campus' main building, was created by students and faculty of the chemical engineering department, who claim it is the first to be created at an institute level.

The fuel has been put to use in some fumigation exercises on campus where diesel was necessary and the group hopes that the plant gradually will find wider use, especially for transportation facilities within the institute's Powai campus.

"It was very exciting. We all stayed up until 4am the night we generated the first batch of biodiesel," said Shrayank Gupta, 22, one of the overall coordinators of the project and a fourth year student at the institute. Around 30 to 35 students have been involved since the project was first kick-started in 2008, with fresh students being recruited to 'Team Biosynth' every year. The group has also won awards for their plant.

The raw materials for the fuel come from the waste edible oil as well as a wild crop jatropha that the group has sourced.

While the institute invested money in building the plant, the project has been student driven, in terms of design, inception and execution.

The group is now in the process of tweaking the plant after their first run last month, and hopes to increase their bio-diesel production gradually.

But the project was not only born of a desire to produce fuel. "It gives you an opportunity to apply what you learn in class in practice, in the campus itself," said Shubhang Garodia, 22, also a project coordinator and fourth year dual degree student at the institute.