TechTalk
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LISTENING TO BUSINESS, APPLYING TECHNOLOGY

Google Now Has A Search Rival- SciNet

Google seems to have a rival when it comes to search. According to a report, researchers in Finland have developed a new search engine that outperforms current ones and helps people search more efficiently.

Touted as SciNet and developed at the Helsinki Institute for Information Technology HIIT, the search engine is unique because it changes internet searches into recognition tasks by showing keywords related to the user's search in topic radar. With the help of the directions on the radar, the engine displays how these topics are related to each other. The relevance of each keyword is displayed as its distance from the center point of the radar - those more closely related are nearer to the center, and those less relevant are farther away. The search engine also offers alternatives that are connected with the topic, but which the user might not have thought of querying. By moving words around the topic radar, users specify what information is most useful for them.

When people are uncertain about a topic, they are typically reluctant to reformulate the original query, even if they need to in order to find the right information. With the help of a keyword cloud, people can more quickly infer which of the search options they receive is more significant for them because they do not need to visit the pages offered by the search engine to find new search words and start again.

People using SciNet can get relevant and diverse search results faster, especially when they do not know exactly what they are looking for or how to formulate a query to find it. While it is often hard for people to put what they are looking for into words, their search needs are often not focused.

According to some estimate the digital universe such as data and documents is expected to grow by 2020 by a factor of 10. Tools that help us transform the time we spend in searching into discovering and understanding information will be increasingly important to enhance productivity and creativity. It is exciting to be addressing this problem in research that needs competencies from different disciplines as we uniquely combine at HIIT, states Professor Giulio Jacucci.

IN THIS ISSUE

Windows 10: A New Generation of Windows

Microsoft Corp unveiled a new generation of Windows, with a wide range of experiences designed to usher in a new era of more personal computing, as well as two new devices designed to extend the Windows experience from large screens to no screens. Windows 10 will be delivered as a service to offer a safer, innovative and updated experience for the supported lifetime of the device. A free upgrade for Windows 10 will be made available to customers running Windows 7, Windows 8.1 and Windows Phone 8.1 who upgrade in first year.

"Windows 10 marks the beginning of the more personal computing era in the mobile-first, cloud-first world," said Satya Nadella, CEO of Microsoft. "Our ambition is for the 1.5 billion people who are using Windows today to fall in love with Windows 10 and for billions more to decide to make Windows home."

"Everything about Windows 10 — the experiences, delivering it as a service and the free upgrade — means that Windows 10 isn't just another product, it's an ongoing relationship — one that will give ongoing value to all our customers," said Terry Myerson, executive vice president of the Operating Systems group at Microsoft. "The new generation of Windows is a commitment — a commitment to liberate people from complex technology and enable them to do great things."

The Future is Now

Uber Wants to Replace Its Drivers With Robots. So Much for that "New Economy" It Was Building.

In May 2014, Uber CEO Travis Kalanick set off alarm bells when he suggested at a tech conference that self-driving cars, and not people, were the future of Uber's ride services. "The reason Uber could be expensive is because you're not just paying for the car you're paying for the other dude in the car," Kalanick said. "When there's no other dude in the car, the cost of taking an Uber anywhere becomes cheaper than owning a vehicle." Ironically, those statements also came one day after the company first trumpeted that half of its drivers working in New York City were making more than $90,000 a year (a claim that's long since been debunked).

When those initial comments about self-driving cars triggered panic among Uber's drivers, Kalanick quickly backpedaled. "Drivers on @uber_nyc making $90k/yr," he tweeted. "Driverless car is a multi-decade transition. Let's take a breath and I'll see you in the year 2035." And yet: Not even a full year later, TechCrunch has reported(and Uber has mostly confirmed in a blog post) that Uber has hired more than 50 senior scientists from Carnegie Mellon and the National Robotics Engineering Center and invested several hundred thousand dollars in building a robotics research lab that will develop a fleet of autonomous taxis.

The Uber Advanced Technologies Center in Pittsburgh will "focus on the development of key long-term technologies that advance Uber's mission of bringing safe, reliable transportation to everyone, everywhere," Uber wrote on its blog. Those involved in the project will "do research and development, primarily in the areas of mapping and vehicle safety and autonomy technology."

Well, any progress on self-driving cars—while potentially great for consumers and overall transit efficiency—is simply bad news for the drivers that Uber employs. Already, that's hundreds of thousands of people, and as Kalanick said at the end of 2014, the goal for this year is to create another 1 million jobs around the world through Uber's platform. Uber is helping to create a new kind of economy—one that empowers contract workers to be their own bosses, on their own schedules, while earning a reliable income.

Technology in schools: Future changes in classrooms

Technology has the power to transform how people learn - but walk into some classrooms and you could be forgiven for thinking you were entering a time warp.

There will probably be a whiteboard instead of the traditional blackboard, and the children may be using laptops or tablets, but plenty of textbooks, pens and photocopied sheets are still likely and perhaps most strikingly, all desks will face forwards, with the teacher at the front. The curriculum and theory have changed little since Victorian times, according to the educationalist and author Marc Prensky.

Most of the education products on the market are just aids to teach the existing curriculum. There is a need to teach better what is being taught today. A whole new core of subjects is needed, focusing on the skills that will equip today's learners for tomorrow's world of work. These include problem-solving, creative thinking and collaboration.

"We are living in an age of accelerating change. We have to experiment and figure out what works. We are at the ground floor of a new world full of imagination, creativity, innovation and digital wisdom. We are going to have to create the education of the future because it doesn't exist anywhere today," said Prensky.

The "flipped" classroom - the idea of inverting traditional teaching methods by delivering instructions online outside of the classroom and using the time in school as the place to do homework - has gained in popularity in US schools.

The teacher's role becomes one of a guide, while students watch lectures at home at their own pace, communicating with classmates and teachers online.

Salman Khan is one of the leading advocates of "flipped" classrooms, having first posted tutorials in maths for his young cousins on YouTube in 2004.Their huge popularity led to the creation of the not-for-profit Khan Academy, offering educational videos with complete curricula in maths and other subjects.

The project has caught the eye of the US Department of Education, which is currently running a $3m (£1.9m) trial to gauge the effectiveness of the method. Now the idea has reached the UK.

Technology Focus

IT Power Shift To Disrupt BI Models

Traditional business intelligence (BI) and analytic models are being disrupted as the balance of power shifts from IT to the business, according to Gartner, which stresses on the need for better governance in an environment marked by the rise of data discovery, access to multi-structured data, data preparation tools and smart capabilities.

Rita Sallam, research vice president at Gartner, said: "Data preparation is one of most difficult and time-consuming challenges facing business users of BI and data discovery tools, as well as advanced analytics platforms."

"However, data preparation capabilities are emerging that will provide business users and analysts the ability to extend the scope of self-service to include information management, and extract, transform and load functions, enabling them to access, profile, prepare, integrate, curate, model and enrich data for analysis and consumption by BI and analytics platforms."

"Self-service data integration will do for traditional IT-centric data integration what data discovery platforms have done for traditional IT-centric BI: reduce the significant time and complexity users face in preparing their data for analysis and shift much of the activity from IT to the business user to better support governed data discovery," said Sallam. "However, specific skills are required. Self-service data integration requires that users master both the technical aspects and the business requirements of joining data together."

Gartner has predicted that basic business user data mashup capabilities will become mainstream as part of data discovery tools in the near future. The demand is likely to add value to the data discovery and traditional BI vendors who are likely to extend their own business user data mashup capabilities to include more advanced preparation features, it adds.

Gartner also expects that by 2017, most data discovery tools will have incorporated smart data discovery capabilities to expand the reach of interactive analysis. Additionally, less than 10% of self-service BI initiatives are expected to be governed sufficiently to prevent inconsistencies that adversely affect the business, through 2016.

Due to an increase in end-user desire for access to business data, and IT's inability to satisfy this need, a growth in self-service BI initiatives has been created. Doug Laney, research vice president at Gartner, said: "As a result of the limited governance of self-service BI implementations, we see few examples of those that are materially successful - other than in satisfying end-user urges for data access."

"This, combined with increasing examples of data privacy and security breaches, along with anticipated instances of public disclosure inconsistencies, will temper businesses leaders' enthusiasm for self-service BI. From unfortunate occurrences like these, we expect resulting investor and customer blowback for organizations with ungoverned, or loosely governed, BI initiatives."

Gartner added that a return to more controlled enterprise BI implementations is expected, or the deployment of self-service BI technologies within a better governed, IT-led project environment.

Datacenters, A Key Target For DDoS Attack: Study

A Distributed Denial of Service (DDoS) attack is an attempt to make an online service unavailable by overwhelming it with traffic from multiple sources. They target a wide variety of important resources, from banks to news websites, and present a major challenge to making sure people can publish and access important information.

Denial-of-service attacks are considered violations of the Internet Architecture Board's Internet proper use policy, and also violate the acceptable use policies of virtually all Internet service providers. They also commonly constitute violations of the laws of individual nations.

Over 70 percent of service providers operating data centers experienced DDoS attacks last year, according to the 10th annual Worldwide Infrastructure Security Report released by Arbor Networks that shows a significant increase from the previous year, when less than 50 percent companies experienced this attack.

According to the study, one third of datacenter operators faced a DDoS attack that exhausted their internet bandwidth. Forty-four percent of respondents said they had experienced revenue loss as a result of DDoS attacks and that operational expense is the top cost for datacenters of such attacks. This underscores just how critical of an issue this continues to be for datacenter operators: downtime means not just lost business for the datacenter operator, but the collateral damage extended to their customers operating business critical infrastructure in the cloud.

"A decade ago, the corporate world was on watch for self-propagating worms like Slammer and Blaster that devastated networks the year before. And data breaches were most likely carried out by employees who had direct access to data files," Darren Anstee, director of solutions architects at Arbor said in a statement.

"Today, organizations have a much wider and more sophisticated range of threats to worry about, and a much broader attack surface to defend. The business impact of a successful attack or breach can be devastating - the stakes are much higher now."

Tech News

Intel Brings Next-gen 'Broadwell' Processor Tech to Mainstream Notebooks, Desktops

Intel's Core M processor promised a new wave of small-screen tablets. But at CES 2015, Intel hustled in the main event: the launch of the fifth-generation "Broadwell-U" Core processor for mainstream desktops and notebooks.

The new Core processors--over 14 of them, including new chips designed for consumer and business PCs, as well as Pentium and Celeron-branded chips--were launched , the preview day before the Consumer Electronics Show begins.

Intel's new Broadwell chips are now shipping--except for the high-end, 28-watt parts that include Intel's premier integrated graphics, the new Iris Graphics 6100. Those will wait until the end of the first quarter to ship. And with Intel's next chip, Skylake, waiting in the wings, it's no wonder Intel's hardware partners plan to show off a slew of Broadwell systems at CES.

Karen Regis, director of Intel's notebook roadmap and strategy, said that Intel expects the Broadwell transition to be the fastest ever, and no wonder: Intel delayed the new Broadwell chips by months after an unfortunate manufacturing glitch, which has now been fixed. But there's one important note: the desktops shown off at CES will use the 15-watt "mobile" parts, indicative of the fact that the lines between a desktop and a mobile PC are blurring. Intel is eager to pounce on what it thinks are 600 million PCs that are four years or older and ripe for a refresh. So, undoubtedly, are its hardware partners, exploring a range of all-in-one desktops, two-in-ones, and traditional clamshell PCs. But Intel said that it also plans to capitalize on the explosion of Chromebooks, with a Broadwell Chromebook announcement expected at CES, and shipments set to begin in February. Who will it be? Intel wouldn't say.

Although sales are being spurred by the end of support for Windows XP, Regis also said that buyers are snapping up new systems "not because they need to but because they're finding something that they really want." A significant chunk of the computing industry is hoping she's right.

IBM announces new cloud-based identity protection

Many of the things we do online require an ID and password, but typically whilst this makes things easier for the site it doesn't always do a lot to protect the user, who may be revealing more information than they need.

For example you may have to reveal your full date of birth and address to a video streaming service in order to verify your age and region, running a risk that the information may fall into the wrong hands.

Now researchers at IBM have announced plans for a new cloud-based technology to help consumers guard their personal data. The technology, called Identity Mixer, uses a cryptographic algorithm to encrypt the identity attributes of a user, such as their age, nationality, address and credit card number in a way that allows the user to reveal only selected pieces to third parties.

Identity Mixer can be used within a digital wallet, which contains credentials certified by a trusted third party, such as a government-issued electronic identity card. It's important to note that the issuer of the credentials has no knowledge of how and when they are being used. It would be able to confirm a user's age and region without revealing any more. This ensures that even if the website is hacked personal data remains safe.

Similarly, if you wanted to make a payment Identity Mixer would be able to confirm that a credit card is valid and that it can accept payment, without actually revealing the full card number or expiration date.

Identity Mixer is now being made available to developers as an easy-to-use web service in IBM Bluemix, IBM's new platform-as-a-service (PaaS) cloud. Identity Mixer incorporates more than a decade of research to bring the concept of minimal disclosure of identity-related data to reality, and now it is ready to use for both computers and mobile device transactions.

How Beer is bringing Drones into the private sector

When you hear the word 'drone,' the image is usually far from positive. Just the dictionary definition is depressing, reminding us of lifeless, Unimaginative positions in cubicles; pale, robotic imitations of life. In recent years, a much darker, destructive connotation has risen thanks to the use of drones in military and surveillance operations. This meaning has become a fixture in everything from debates on foreign politics to pop culture, with drones playing a major role in the recent season of 24. However, drones aren't all bad. Here's an interesting look at some more peaceful applications of drone technology, and what we can expect in the coming years Light Hearted Applications.

And now, on to more lighthearted applications. People are coming up with a wide range of uses for drones, ranging from aerial photography to beer delivery. At music festivals all over the nation, quad copter drones with four rotating helicopter blades hover over crowds, often decked out in neon lights. The drones are an ideal carrier for GoPro cameras, since they provide a stable aerial view for concert shots. Giddy concertgoers chase drones around like children scaring birds on the beach.

In South Africa, this technology has even been used to deliver treats to music fans. Drones were used to air-drop cold beers to fans who requested them via smartphone app at the Oppikoppi festival, which brings top rock bands to the region each year. "It's an almost Biblical thing that beer is dropping from the sky," said the festival director. We at Fueled have got to agree. It's a marvelous use of the new technology, and a refreshing alternative to more violent uses.

Once you have beer, you know that pizza will shortly follow. Domino's has tested a pizza delivery drone outside of London. Currently, the drone can only carry two pizzas at once, but with added testing and better technology, that capacity should only improve.

Just as the case of GPS, the arrival of military technology on the market has fueled a wide range of applications that go far beyond fast food. Substantial advances in areas like disaster relief and environmental data gathering may be just around the corner, thanks to drones.

Tech News

Digital India: First Hi-Speed Rural Broadband Network in Kerala

Minister for Communications and IT, Ravi Shankar Prasad, will be commissioning India's First Hi-Speed Rural Broadband Network in Idukki district of Kerala under the Digital India Program.

The event marks a key milestone in ushering in a new era of Digital India. National Optical Fiber Network (NOFN) is the largest rural connectivity project of its kind in the world. It seeks to link each of the 2.5 lakh Gram Panchayats of India through Broadband optical fiber network. On its completion, NOFN is expected to facilitate broadband connectivity to over 600 million rural citizens of the country.

NOFN, which is being funded by the Universal Service Obligation Fund (USOF), Department of Telecom, Ministry of Communications and IT, Government of India, is envisaged as a non-discriminatory telecom infrastructure, which will bridge the gap in rural telecom access.

NOFN will enable each of the 2.5 Lakh GPs to have 100 Mbps of bandwidth, thereby facilitating the delivery of various e-Services and applications including e-health, e-education, e-governance and e-commerce in the future.

Special Focus

VMware Unleashes VMware Integrated OpenStack

Significant moment for open-source cloud OS.

It's been more than two years since VMware joined the OpenStack community, but recently the company, in a sense, consummated the relationship by releasing its first distribution of the open-source cloud operating system.

At an event in San Francisco leading up to VMware Partner Exchange, CEO Pat Gelsinger and CTO Ben Fathi formally presented to partners the production version of VMware Integrated OpenStack.

The new distro will enable current VMware customers to access the powerful functionality of the open-source cloud platform while maintaining their legacy VMware environments and workloads. VMware Integrated OpenStack will be free for vSphere enterprise customers and with all editions of vCloud Suite.

In its infancy, OpenStack was envisioned as a pure rival to VMware, which at the time utterly dominated the data center virtualization arena. In 2012, however, VMware telegraphed its OpenStack evolution by acquiring Nicira, a software-defined networking developer contributing to the project, as well as DynamicOps, a vendor of cloud automation and management tools. Boris Renski, CMO and co-founder of Mirantis, another rival OpenStack vendor, said, "There are many enterprises with significant investments in VMware's virtualization solutions who don't want to change hypervisors and are already paying their vCenter licenses." Renski, who sits on the OpenStack board, said those customers "are great candidates for VMware's OpenStack distro." He also noted that Mirantis already partners closely with VMware to give joint customers greater flexibility and the best tools for specific workloads.

What VMware integrated OpenStack means for Customers?

- ***Available for all vSphere Enterprise plus Customers***:

  VMware integrated OpenStack is included at no additional charge for all new and existing vSphere Enterprise Plus, vSphere with Operation Manager Enterprise Plus and vCloud Suite Customers.

- ***Developer friendly OpenStack Services and APIs***:

  Deliver OpenStack APIs to development teams on top of the existing VMware infrastructure.

- ***Simplified OpenStack deployment and Operation***:

  One can Leverage existing expertise to deploy and operate OpenStack on VMware infrastructure quickly and easily using familiar VMware cloud management platform tools and technologies

- ***Single Support Contract***:

  VMware Support for both OpenStack and the underlying VMware infrastructure. Support for VMware integrated OpenStack is optional and can be purchased separately.

(Galaxy, an Enterprise partner of VMware, has niche skills and expertise to help Enterprises in their journey to cloud.)

About Galaxy

- One of the most respected Information Technology integrator of the best of breed products and solutions for Enterprise Computing, Storage, Networking, Security, Automation, Application Delivery, ERP and Business Intelligence.
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- The Galaxy Technology Innovation Centre, a state-of-the-art integrated hardware and software laboratory, allows customers a hands-on look at the latest storage, backup, security, application delivery and virtualization technologies.
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- Four business units collaborate to provide a full spectrum of services and ensure smooth projects. Together, they provide our customers with truly end to end professional IT Services.

Galaxy Business Solutions
System integrators of best of breed technologies to deliver solutions to the problems and challenges that confront enterprises

Galaxy Technology Services
Skilled pool of resources consistently maintains and delivers enterprise class service levels

Galaxy Network Solutions
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Galaxy BI Consulting Services
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"We understand the need of a common vendor for all your IT needs. Hence, we are committed to long-term partnerships by delivering on our commitments."

MD Speaks

"With Apple posting record earnings, most of which was fuelled by the iPhone 6 sales, I am compelled to write about the importance that mobility holds to the future and the immediate trends that we are going to see during the course of this year.

With an estimated 6 billion mobile devices being used all over the world, this could quite be the single largest addressable market in times to come. Enterprises are now running head over heels to engage with this market. This has resulted in a situation where there is an acute shortage of skilled mobile developers and the backlog of mobile applications keeps growing.

To address this, we are seeing the emergence of no or low code mobile development platforms. Increasingly, Business Analysts would start 'developing' apps on such platforms thus bridging the gap between demand and supply.

Another important thing with mobile consumers is that they are extremely unforgiving. If an app is too slow or does not work or has an unfriendly interface, the consumer will just move to another app never to return again. To avoid this, each mobile application will have to go through quality tests on a large number of devices. This should lead to the launch of a number of automated mobile testing environments that would enable existing mobile applications to be tested on newer devices & operating systems with very little effort and almost instantaneously,

Of course, for complex applications, mobile developers would still be required and there would be the case for some amount of manual testing. But the trend would move towards automation of both the development and testing of mobile apps".