



K.L.N. College of Engineering

Department of Information Technology



## PRINCIPAL MESSAGE



## THE EDITOR'S DESK



It is a matter of great pride and satisfaction for K.L.N. COLLEGE OF ENGINEERING to bring out the News Letter 'I'STORM' Released from the Department of Information Technology. The College has made tremendous progress in all areas- academic, non-academics, capacity building relevant to staff and students. The College has achieved another milestone in getting NBA (National Board of Accreditation). I am confident that this issue of Department News Letter will send a positive signal to the staff, students and the person who are interested in the Technical education and Technology based activities. A News Letter is like a mirror which reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general. I congratulate the Editorial Board of this News Letter who have played wonderful role in accomplishing the task in Record time. I express my deep sense of gratitude to Dr.R. Alageswaran, HOD/IT under whose guidance this Technical work has been undertaken and completed within the stipulated time. Also my heartfelt Congratulations to staff members and Students for their fruitful effort. With Best Wishes.

**PRINCIPAL**  
**Dr.A.V. RAMPRASAD**

It gives me immense pleasure to note that response to this newsletter of our department i'STORM has been overwhelming. The wide-spectrum of articles in different sections gives me a sense of pride that our students and professors possess creative potential and original thinking in ample measures. Each article is entertaining, interesting and absorbing. I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them. Commendable job has also been done by the Editorial Board in planning for and producing the Newsletter. My congratulations to the team who took the responsibility for the arduous task most effectively. I am hopeful that this small piece of technical work shall not only develop the taste for reading among students but also develop a sense belonging to the institution as well.

**H.O.D (I.T)**

**DR.R. ALAGESWARAN**

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## OUR COLLEGE :

### Vision

To become a Premier Institute of National Repute by Providing Quality Education, Successful Graduation, Potential Employability and Advanced Research & Development through Academic Excellence.

### Mission

To Develop and Make Students Competent Professional in the Dynamic Environment in the field of Engineering, Technology and Management by emphasizing Research, Social Concern and Ethical Values through Quality Education System.

## OUR DEPARTMENT:

### Vision

To emerge as a centre of excellence through innovative technical education and research in Information Technology.

### Mission

To produce competent information technology professionals to face the industrial and societal challenges by imparting quality education with ethical values.

## Program Outcome

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## Program Educational Objectives

*The Educational Objectives of Information Technology Program represents major accomplishments that we expect from our graduates to have achieved three to five years after graduation. More specifically our graduates are expected.*

- 1. To excel in industrial or graduate work in information technology and allied fields.*
- 2. To practice their professions conforming to ethical values and environmental friendly policies.*
- 3. To be able to have an exposure in emerging cutting edge technologies and adapt to ever changing technologies.*
- 4. To work in international and multi - disciplinary environments.*

## Program Specific Outcomes

- 1. To create better learning environment in line with technological updation and research progress.*
- 2. To give industry exposure through research and consultancy in Information and Communication Technologies.*

## ICON OF THE MONTH

### Anthony Levandowski



**Anthony Levandowski** (born March 15, 1980) is an American self-driving car engineer. In 2016 he co-founded Otto, an autonomous trucking company, with Lior Ron, Claire Delaunay and Don Burnette. Prior to Otto, he built the Google self-driving car while working as a co-founder and technical lead on the project, known as Waymo. He is known for his work in the advancement of self-driving technology.

On May 15, 2017, United States District Judge banned Levandowski from further work on Otto's Lidar technology on the basis of having breached the confidentiality of former employer Waymo. On May 30th, 2017, Uber fired Levandowski for failing to cooperate with investigators.

#### Early life and career

In 1998, Levandowski entered the University of California, Berkeley, where he earned bachelor's and master's degrees in Industrial Engineering and Operations Research. As a freshman, he launched an intranet service from his basement. In 2004 he and fellow UC Berkeley engineers built an autonomous motorcycle, nicknamed Ghost rider, for the DARPA Grand Challenge. The Ghost rider motorcycle competed in the DARPA Grand Challenge in 2004 and 2005 and was the only autonomous two-wheeled vehicle in the competition. The motorcycle now resides in the Smithsonian National Museum of American History.

#### Recent career



Levandowski (right) at MCE 2016

In 2007 Levandowski joined Google to work on Google Street View with Sebastian Thrun, whom he had met at the 2005 DARPA Grand Challenge. While still working at Google he founded 510 Systems, a mobile mapping start-up that experimented with Lidar technology. Then in 2008 he founded Anthony's Robots to build a self-driving Toyota Prius called the "Priobot." According to The Guardian, it was "a self-driving Toyota Prius with one of the first spinning Lidar laser ranging units, and the first ever to drive on public roads."<sup>[1]</sup>

While working at Google, Levandowski simultaneously established other companies as a side project. His companies 510 Systems and Anthony's Robots were later bought into Google.

Levandowski worked on Google's self-driving car until January, 2016 when he left to found Otto, a company that makes self-driving kits to retrofit big rig trucks. Quoted in The New York Times, Levandowski said he left Google because he "was eager to commercialize a self-driving vehicle as quickly as possible". Otto launched in May, 2016 and was acquired by Uber in late July, 2016. As part of the acquisition Levandowski assumed leadership of Uber's driverless car operation in addition to his work at Otto.

In September 2017, Wired magazine reported that Levandowski had established a religious organization called 'Way of the Future' to "develop and promote the realization of a Godhead based on Artificial Intelligence."

Lawsuit

According to a February 2017 lawsuit filed by Waymo, the autonomous vehicle research subsidiary of Alphabet Inc, Levandowski allegedly "downloaded 9.7 GB of Waymo's highly confidential files and trade secrets, including blueprints, design files and testing documentation" before resigning to found Otto. In March 2017, United States District Judge William Haskell Alsup, referred the case to federal prosecutors after Levandowski exercised his Fifth Amendment right against self-incrimination. In May 2017, Judge Alsup ordered Levandowski to refrain from working on Otto's Lidar and required Uber to disclose its discussions on the technology Levandowski was later fired by Uber for failing to cooperate in an internal investigation.

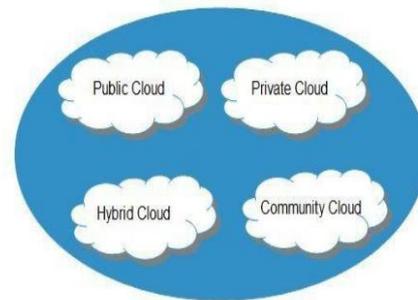
- S. Kiruthika (Second Year)

Cloud Computing

Scaling resources to gain efficiency has led to the first wave of cloud service boom with original Amazon's Web Services. Now many believe we are entering something like a second wave and as business software and web is moving towards big data management, the more diverse and cloud data centers come into play. Trends to keep an eye on: Smaller and regional providers. As reported by the Forrester analyst Dave Bartoletti, with market giants like Online Shopping for Electronics, Apparel, Computers, Books, DVDs & more, Microsoft, Google and IBM, which have established themselves as "mega-cloud providers", in 2017 you can expect more new data centers and concessions, such as Microsoft's agreement to have T-Systems manage its cloud in Germany to meet data localization requirements. "But the big players won't be able to service every unique request, which means smaller regional players will see an uptick in adoption in 2017. Bartoletti recommends: "Keep your options open and don't be afraid to use multiple providers,"

It's all about cost and resource optimization. Reducing load of complex cloud services on weekends, holidays, and other days off when there

is no need in them, can cut costs significantly and leverage resources for other priorities. As an example, Amazon OpsWorks is an integrated management experience for the entire application lifecycle including resource provisioning, configuration management, application deployment, monitoring, and access control.



The essence of the concept of cloud computing is to provide end users with remote dynamic access to services, computing resources and applications (including operating systems and infrastructure) over the Internet.

Development of the host sphere was due to the need for software and digital services which can be managed from within, but that would be at the same time more economical and efficient through economies of scale. Most service providers offer a cloud in the form of VPS-hosting, virtual hosting, and software-as-a-Service (SaaS). Cloud services for a longtime were provided in the form of SaaS, for example, Microsoft Hosted Exchange and SharePoint.

Thus, industry of the cloud computing is growing rapidly and, according to analysts, by 2012 it will account for 9% of all IT spending. In addition, the emphasis in the industry is increasingly shifting from hosting to cloud computing and SaaS.

Cloud computing is an effective tool to increase profits and expand sales channels for independent software vendors (ISV), service providers and VAR-intermediaries (in the form of SaaS). For

Hosters cloud computing offers huge growth potential. Also, the concept of cloud computing significantly changed the traditional approach to the delivery, management and application integration.

Cloud computing is used in small business. First of all, for small businesses it is important that the uses of cloud-based infrastructure technologies are much cheaper than the management and support of their own physical servers.

Licensing model from provider provides lower costs than traditional software. Cloud infrastructure provides small companies with mobility at work. For example, VoIP services based on cloud technologies are cheaper and mobile than a regular phone.

The same is applied to applications of Google, through which employees can work with documents simultaneously. For the project management it is possible to use Base camp, Apollo and other services. Meetings with colleagues have become easier with the help of services GoToMeeting

Cloud Computing model is particularly attractive for enterprises segment of small and medium-sized businesses and start-up companies, because it allows to significantly reduce investment in technology infrastructure and pay only directly used by information technology.

Growth of the market of Cloud Computing services makes them attractive to business leaders, as well as directors of departments of information technology that hopes to move information technology costs from the category of capital in the transaction to be able to respond flexibly and promptly respond to the changing needs of their businesses. This aspect is important and convincing, when approving of the enterprise budgets for information technology.

#### CLOUD COMPUTING HAS THE FOLLOWING PROPERTIES THAT MAKE UP THE COST-EFFECTIVENESS OF THIS MODEL:

- Ensures a faster return on investment compared to traditional information technology;
- Requires no previous capital expenditures;
- Minimizes operating costs;
- Requires less technical resources;

– Provides a more simple level of integration. Also one of the most important advantages Cloud Computing – regardless of geographic location, both the client and service provider.

Thus, organizations are striving to realize all the potential opportunities through the rapid introduction of advanced business models and reducing the barriers to innovation and the required changes in IT.

#### PROS OF CLOUD COMPUTING:

- Services are paid for-use basis.
- No upfront investment in IT, which is especially important for small and medium-sized businesses, as well as startup companies.
- No need to install and maintain servers, install software updates or worry about the compatibility of software and hardware.
- No need to manage software licenses.
- There are opportunities for easy expansion to serve more users or the introduction of additional services – or clotting, such as the holiday season.
- Ability to access documents and functions from any computer without being tied to a specific system.
- Easy integration into existing computing environment of the organization.

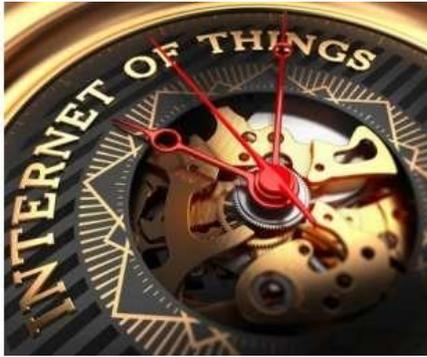
#### CONS IN USING CLOUD COMPUTING:

- Data protection laws require the control of personal data and restrict the movement of such data outside the country.
- Availability is not guaranteed – a few cloud-suppliers involved in the process, there are various guarantees continuity of service, different values of operating time to failure and time of data recovery. This means that the services are unreliable for critical applications.
- Confidentiality is a major concern, as criminals, spies and government agencies can easily get the data if they are stored outside the organization
- Difficult to maintain compliance with laws and regulations. For example, the service provider can transfer data to another country, where cheaper electricity, but laws are less strict.

-Lakshmi Prabha.P (Second Year)

## IoT

IoT is a mega technology trend that will not only be an endurance test for legacy systems but will also shape the fate of small and big companies in many different industries. Estimates are for 50 billion IoT connected devices by 2020 and 100 billion by 2025.



### **The future is in IOT, but why are Indian CIOs still waiting in the wings?**

- Indians create IoT software for the globe but are slow in adopting it within the country
- Legacy architecture holds back Indian companies from providing real-time user data analytics
- CIOs are slowly waking up to the advantages of IoT and having their operations on the cloud, which promotes more ownership and accountability.



For those who do not know what legacy IT means, the whole technology stack of RAM, disk, networks, and storage were an integral part of corporate building. The cloud redefines everything and removes the need for commodity hardware to store data. Today, virtual machines

can be generated at an instance to provide for IOT devices, and data can be crunched through cloud networks.

IoT is one of the transformational trends that will shape the future of businesses in 2018 and beyond. Many firms see big opportunity in IoT uses and enterprises start to believe that IoT holds the promise to enhance customer relationships and drive business growth by improving quality, productivity, and reliability on one side, and on the other side reducing costs, risk, and theft



Block chain is more than a concept now and has applications in many verticals besides FinTech including IoT.

Block chain technology is considered by many experts as the missing link to settle scalability, privacy, and reliability concerns in the Internet of Things. Block chain technology can be used in tracking billions of connected devices, enable the processing of transactions and coordination between devices; allow for significant savings to IoT industry manufacturers.

This decentralized approach would eliminate single points of failure, creating a more resilient ecosystem for devices to run on. The cryptographic algorithms used by Block chain would make consumer data more private. In 2017 IoT will converge with Block chain for better security and privacy opening the door for a new category in applications, hardware, and talents. IoT is creating new opportunities and providing a competitive advantage for businesses in current and new markets. It touches everything not just the data, but how, when, where and why you collect it.

The technologies that have created the Internet of Things aren't changing the internet only, but rather change the things connected to the internet. More mobile moments (the moments in which a person pulls out mobile device to get what he or she wants, immediately and in context) will appear on the connected device, right from home appliances to cars to smartwatches and virtual assistants. All these connected devices will have the potential of offering a rich stream of data that will then be used by product and service owners to interact with their consumers.

-M. Manicka Jothi (Second Year)

### Role of Robotics



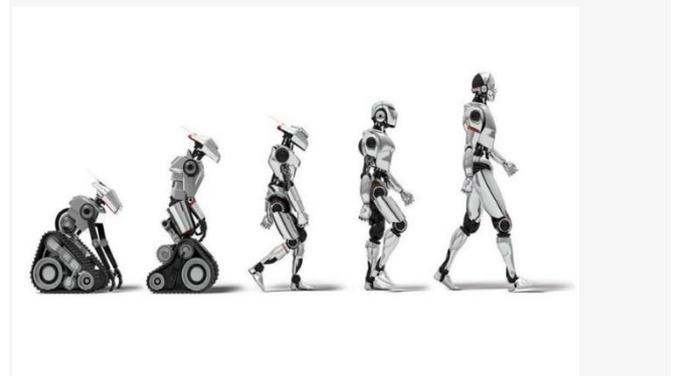
As the complexity of robots increase, their area of use in industry expands. The basic function of industrial robotics is in gigantic manufacturing industry automations in which defined routine tasks are repeated continuously in the same way. These large and complex robots will take part in automotive industry. We are going to use industrial robots for painting, sealing, the production of parts and for combining these parts. The reason why robots are suitable for these tasks is that very little feedback is enough for process control. Industrial robots can be produced in different sizes and they can do greater amount of work than a human can do.

Our robots which are going to be used in these fields are generally cumbersome and fixed positioned. Their technology is based on the logic of robotic arms. Management and power units are located outside the system. Stepping or servo (remote) motors are used in order to ensure movement. Sensitivity is of great importance.

Sliding-mode controls have been developed for the elasticity of joints. They will be controlled by PLC (Programmable Logic Controller) and by computers at the recent period. But when it comes to industry, we'll prefer PLC more because PLCs consist of integrated circuits and perform commands precisely. Since multitasking is the case in computers, it may get locked-up, in which case the process may be disrupted. A recent approach is to program PLCs via computers. Engine control is used in situations which require power. Revolutions per minute and speed are provided by servo controller while status information and feedback are provided by generators and sensors. German robot producer KUKA (Keller und Knappich Augsburg) industrial robots can be shown as an example of industrial robots. Operational robotics systems were developed in order to work in such dangerous situations as the radiation environment and toxic waste refinement which is not suitable for human beings.

### The Game Changer-Industrial Robots

Most manual manufacturing processes can, in fact, be replaced by hi-tech machines in a safer, faster, finer manner while the concepts of industrial robots contain a lasting impact to inspire further utilization of advanced machines in other industries thus constitutes to a revolutionary game-changer. Safeguarding the workers is thus another pillar that makes industrial robots a milestone in the manufacturing development. ... Not only leading the evolution of manufacture, but industrial robots also contain a lasting influence spreading to other industries to act as the vanguard on automatic...



## Robotics Industry

In the beginning of robotics (1950s - 70s) industry pioneers envisioned a day when robots would perform the dangerous jobs instead of people, but some industries remained unconvinced about the benefits of robotics. The robot manufacturers were dependent from the automotive industry. It was time for the robotics industry.



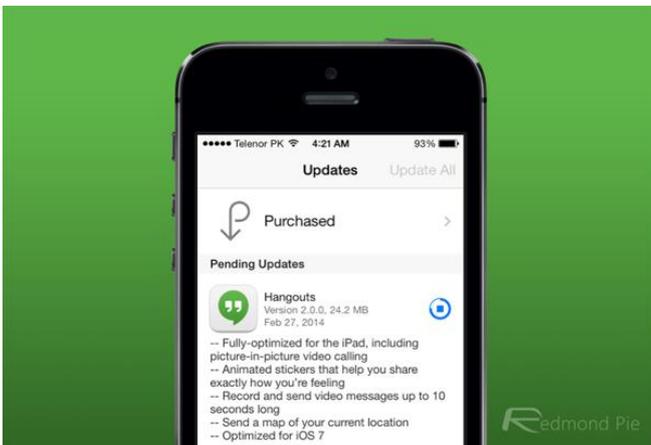
## Computers in Manufacturing

This period, now known as the Industrial Revolution, saw the start of the factory system and gave birth to mechanization and the manufacturing industry. ... During the 1970s, computers became part of the manufacturing system, enabling fully automated production lines, robot workers and new design and testing capabilities

-M.Loga Meenakshi(Second Year)

## iOS

## **How Apple Group Face Time could replace Google Hangouts Chat and Skype for Business**



A useful new feature Apple introduced at its developer conference will allow multiple parties to participate in a FaceTime group video chat and could be competition for Google Hangouts Chat and Skype for Business. Before, only two people could participate in a FaceTime video chat. Now, when iOS 12 rolls out later this year, up to 32 people can participate in Group FaceTime. This will make it a strong possibility that the enterprise will find more uses for iOS devices as workplace tools.

Many business groups use Google Hangouts Chat or Skype to communicate with multiple people at once, and the new FaceTime feature will allow for Apple to be a direct competitor to those collaboration tools.

"This year FaceTime is going to take a big leap forward," said Craig Federighi, Apple's senior vice president of software engineering, at Apple's WWDC in San Jose, CA. "It helps us deepen our connection with people wherever they are.

"Group FaceTime chat is a good way for Apple to move into the enterprise, according to Tyler Koblasa, CEO of CloudApp. "If Apple hopes to expand its workplace offerings, then increasing the number of people who can be on a FaceTime call is a great first step for the company to move further into this space. Apple is already good at creating continuity for consumers across their devices, and business users would likely want this capability expanded to include other areas like video conferencing," Koblasa said. Being able to use video conferencing in a meeting is essential for a mobile workplace.

"As workforces become increasingly more agile, they will become more dependent on cross-team collaboration and communication tools. By encouraging teams to use cameras during conference calls, it will help connect the employees with one another, improve focus and engagement with the discussion, and let users see and react to others' responses, creating a more natural dialogue.

This kind of offering from Apple could be the first step to competing on a larger scale for business clients in terms of video conferencing and collaboration,"

## Department of Information Technology

"Small groups within larger enterprises will still need the higher enterprise-grade quality with additional capabilities like document/team collaboration, desktop sharing, and corporate directory integration; and with the management and security provided by the corporate IT group. Examples of this are Skype for Business, Microsoft Teams, Cisco WebEx teams, and Slack to name a few," Chilcott said.

One key element will be whether employees have Apple devices, according to Paul Bischoff, tech expert and privacy advocate at Comparitech.com.



"I don't think FaceTime group calling will replace Hangouts for the simple fact that Hangouts can be accessed in a web browser, whereas FaceTime requires an Apple device. If your whole team has Apple devices, then it could work, but most office environments use a mix of different devices.

Because Hangouts is web-based, it can be used in a web browser on any device, even if the person has never used the device before. That flexibility just isn't available in FaceTime," Bischoff said.

**-L. Godwin (Second Year)**

## NETWORKS

Network engineers design and implement network configurations, troubleshoot performance issues, carry out network monitoring and configure security systems such as firewalls. They often report to a CIO, chief information security officer and other line-of-business leaders to discuss and decide upon overall business goals, policies and network status updates.

## i 'storm- a technical thunder

In many situations, network engineers work closely with project managers and other engineers, manage capacity and carry out remote or on-site support.



Network engineers may also pursue different paths within the networking field. Network analysts specialize in installation and maintenance for networks and often cross over between the technical and business sides of an organization. More specialized roles include cloud networking architects, who assist organizations with cloud infrastructure deployment, and network security specialists, who detect and prevent network security threats. Other specialists focus on engineering for VoIP, telecom and data centers.

### **Responsibilities of a network engineer**

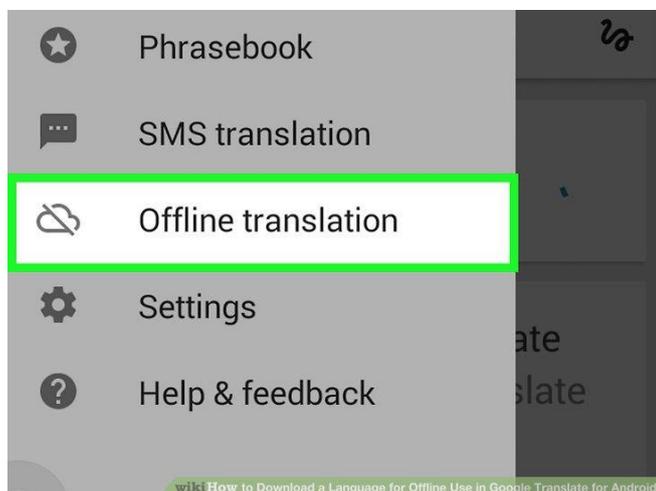
Network engineers focus on delivering high-availability network infrastructure to sustain the online and on-site information technology activities of users.

Network engineers often overlap with other roles, such as computer network architects or security systems engineers, and work internally within an organization or as outside consultants.

**-N.R.C. Santhosh (Second Year)**

## ARTIFICIALINTELLIGENCE

### Google AI makes international business communication easier with offline translation



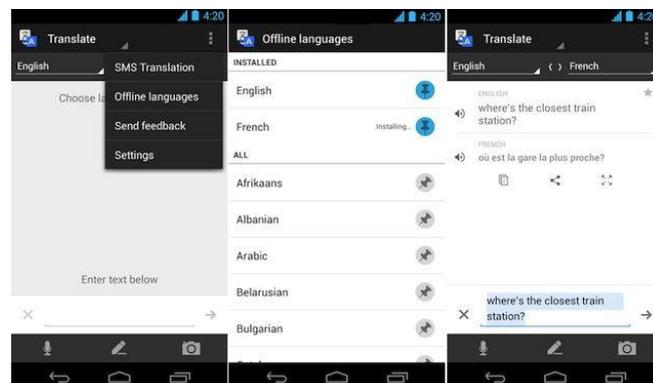
Google recently announced offline neural machine translations in its Translate app, featuring a whopping 59 languages.

Neural machine translations (NMT) in the Google Translate application now works offline on both iPhone and Android. Prior to this update, translations in the app were phrase-based, meaning sentences would be translated in chunks. Instead, NMT translates full sentences, taking into account context and producing a smoother translation. The update will roll out in the next few weeks, according to the post.

The offline functionality could be useful for international business travelers, especially those who travel to regions with spotty Wi-Fi or poor signal. The NMT functionality could also ease communication due to its more accurate translations. Between communicating with other people, conducting foreign business meetings, or simply getting around, Google Translate can be there every step of the way—with or without connectivity. Additionally, each language only takes up 35-45MB of room, the post noted, leaving plenty of storage on your device.

Google introduced NMT two years ago; however, this technology was only available in the online version of Google Translate, the post said. NMT was first offered in only eight languages, but the

current offline NMT function is able to translate 59 languages. Bringing NMT offline and on-device, Google creates the opportunity for easier global communication and interaction between people.



The 59 languages Google Translate supports offline are as follows: Afrikaans, Albanian, Arabic, Belarusian, Bengali, Bulgarian, Catalan, Chinese, Croatian, Czech, Danish, Dutch, English, Esperanto, Estonian, Filipino, Finnish, French, Galician, Georgian, German, Greek, Gujarati, Haitian, Creole, Hebrew, Hindi, Hungarian, Icelandic, Indonesian, Irish, Italian, Japanese, Jannada, Korean, Latvian, Lithuanian, Macedonian, Malay, Maltese, Marathi, Norwegian, Persian, Polish, Portuguese, Romanian, Russian, Slovak, Slovenian, Spanish, Swahili, Swedish, Tamil, Telugu, Thai, Turkish, Ukrainian, Urdu, Vietnamese and Welsh.

As further pointed out in the post, the offline translation are only possible due to improvements in on-device artificial intelligence (AI). As these technologies continue to improve, it could lead to even more high-level functionality brought offline.

To initiate NMT offline translations, open your app on iPhone or Android. If you've used the app previously, a banner will appear that will take you to the correct page to update offline files. If you're new to the app, go to offline translation settings and click the arrow next to the language package you want to download. You're all set.

## BIG DATA

### Why data scientists are trading traditional big data for cloud-native tech



Cloud-native data science is on the rise, as traditional Hadoop-centric big data infrastructure falls out of favor, according to a Wednesday report from data science platform Anaconda. The company surveyed 4,218 data science students, professionals, academics, and software developers who use the platform.

In terms of data sources, files reign supreme, with the majority of data scientists (89%) tapping CSV or other files, the report found. In second place, 49% of data scientists surveyed said they use a SQL database like Oracle or MySQL, and in third, 25% use a REST API from another app like Twitter.

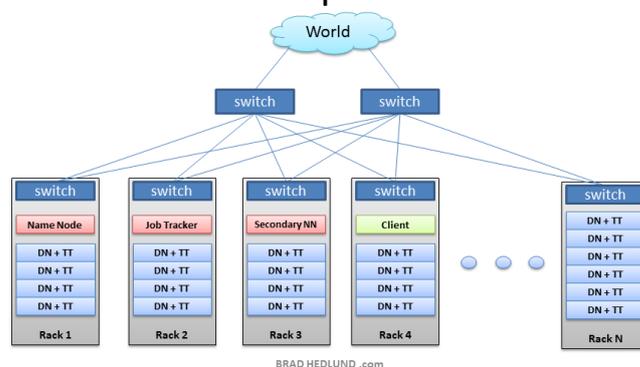


Google Cloud's data services just edged out traditional big data stores like HDFS/Hadoop/Spark, with both gaining about 17% of users. Amazon Web Services (AWS) had about 16% of users taking advantage of their data offerings.

To scale out data science, practitioners are increasingly turning to Linux servers (34%) and Docker (19%), as opposed to Hadoop/Spark (15%). Kubernetes is also on the rise (5.8%), especially compared to Apache Mesos (0.85%).

"The survey shows that data science is undergoing a shift away from traditional big data (Hadoop/Spark) towards cloud-native technologies such as Docker containers, Kubernetes and API-driven applications," Mathew Lodge, senior vice president of products and marketing at Anaconda, said in a press release.

### Hadoop Cluster



Hadoop has dominated on-premises data infrastructure for the past decade, the report noted. However, it was introduced in 2005, and today, what was big data back then can now fit on a single server's memory. There are also a number of alternatives for companies other than building a Hadoop data lake. Containers are also growing in production and enterprise adoption, the report said. It's also interesting that Google Cloud Platform's data services outranked AWS and Microsoft Azure, despite the fact that the platform comes in third behind those two in terms of enterprise adoption. As more companies move to the cloud and expand their use of data analytics, it's possible that Google Cloud Platform could see more pickup due to its strengths in this area.

-S. Maragatha Meenakshi (First Year)

## WEB DESIGNING

### Get ready for the next wave of HTML5 innovation



The death of Adobe's Flash forces content creators to move to HTML5. Neuranet CEO Paul Vincent explains how publishers and agencies can use Flexitive to create better HTML5 web designs.

"It's definitely an HTML5 world now," Paul Vincent, CEO of Neuranet said. Tech Republic's Dan Patterson met with Vincent to discuss the death of Adobe's Flash and how Neuranet Flexitive tool can help content creators build better HTML5 designs. Vincent started looking into HTML5's capabilities and built the design tool Flexitive when Flash began to lose value due to its lack of support on mobile devices. The tool allows designers to export content in HTML5 packages that are responsive and adaptable to any size screen.

"Responsive design came out as a trend for web design a few years ago...but what we did was take it to the next level to allow you to adapt to unlimited sizes," Vincent said. Flexitive is built in the browser and based on HTML5 itself, which allows users to export whatever they create in the tool as HTML5, he added. Because of the shift from targeting the mass media to targeting a specific audience, Flexitive also allows designers to duplicate and adjust each of their creations so that it aligns with each of their targeted audiences.



The reason Flash stuck around for so long, Vincent said, was because the entire advertising industry was based on it and building it in. Since it was so popular among the industry, it was difficult to switch to HTML5. The end of support for Flash on desktop browsers was the big impetus for agencies to make the switch. As the advertising industry begins to move toward more flexible ads and improving user experiences with ads, creators will have to learn how to design ads for HTML5 while keeping up with industry standards.



"With Flash we had a much more interactive world...when HTML5 came along, some agencies found it harder to replicate what they were doing in Flash."

-N.K.K. Krishna Chand (Second Year)

PlacementInternship**2014-2018 BATCH - PLACEMENT**

No. of Offers	Name of the Student	Designation the Company
1.	VISHALI P U	ARICENT
2.	SAICHITRA T N	ARICENT
3.	SULOSH MEENA R B	ARICENT
4.	PRADEEP K R	ARICENT
5.	ABHISHEK S A	ARICENT
6.	DIXIT JAIN R	VURAM TECHNOLOGIES
7.	SANDHIYA R	INFO VIEW
8.	DEEPIKA M	SOLARTIS
9.	SHANTHI C V	SOLARTIS
10.	SUSMITHA S	TCS
11.	DEEKSHITHA RANI T R K	METAVARSE
12.	SHANTHI RATHNA K	APPTIVO
13.	YAAMINI P R	SUTHERLAND
14.	SUBASHRI A	SUTHERLAND
15.	AARTHY M G	INFOSYS
16.	KIRUTHIGA	INFOSYS
17.	JEEVA LAKSHMI A D	METAVARSE

**2014-2018 BATCH - INTERNSHIP**

No. of Offers	Name of the Student	Designation the Company
1.	VISHALI P U	ARICENT
2.	SAICHITRA T N	ARICENT
3.	SULOSH MEENA R B	ARICENT
4.	PRADEEP K R	ARICENT
5.	ABHISHEK S A	ARICENT
6.	DEEPIKA M	SOLARTIS
7.	SHANTHI C V	SOLARTIS
8.	DEEKSHITHA RANI T R K	METAVARSE
9.	JEEVA LAKSHMI A D	METAVARSE

TIMELINEMultimedia contest on Non-violence

On 03-10-17 Multimedia contest on Non-violence was conducted and students of second year N.K.K. Krishna Chand and N.R.C. Santosh presented their ideas and was awarded by The Principal Dr.A.V. Ram Prasad

HEAD COUNT OF STUDENTS  
PLACED IN FINAL YEAR

(2014-2018) (up to March)

Company name	Count
ARICENT	5
VURAM TECHNOLOGIES	1
INFO VIEW	1
SOLARTIS	2
METAVARSE	2
NFOSYS	2
TCS	1
APPTIVO	1
SUTHERLAND	2

**Hackathon 2K17 in association with Honeywell Technology Solutions. A non-stop 24 hours project contest**



A nonstop 24 hours project contest (13-10-17&14-10-17) Honeywell Technology Solutions and Team guided and judged our students enrolled in Hackathon 2K17. Students are able to understand the problem statement and develop algorithms and product for a specific problem in a day.

**Expert Talk on “IT Opportunities**



On 11-11-17 Expert Talk on “IT Opportunities was conducted for 1st year students. Students are able to get to know the scope of IT job and career in future.

**ACHIEVEMENTS**

**TFSD**



TFSD a short-term software development course was organized by Third years and students of second year Arputha Jeron Xavier and Arul Armstrong was awarded first prize

**Multimedia Contest**



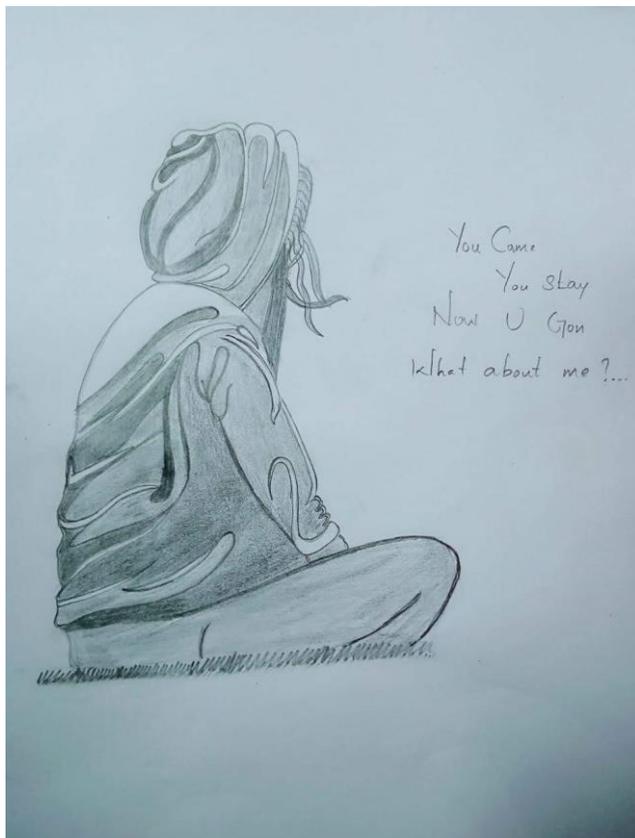
Multimedia contest on Non-violence was conducted and students of second year N.K.K. Krishna Chand and N.R.C. Santosh was awarded first prize

## Hackathon 2K17



Honeywell Technology Solutions & Team guided and judged the students of Third year enrolled in it. Students of Third year was selected as one among the top three projects.

## OUT OF THE BOX



-R. Thendral (Second Year)

## You'd Always Be There

You are the friend, I could always count on.

Without looking hard, you'd always be there.

Through struggles and fights, some from you and of mine.

No matter the issue, you'd always be there.

I don't think I thanked you or appreciated your pursue.

Even if I didn't want you, you'd always be there.

So now that I look back, and am thankful for you,

I hope you know I'm glad, you'd always be there.

-N.H. Sarumathi (Second Year)

**Suggestions and Feedback Contact:**

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