Shri Shankaracharya Institute of Professional Management and Technology Raipur

Computer Science and Engineering

CYBER TRINITY

SSIPMT RAIPUR

CSA — Execution with Perfection

CONTENTS

SSIPMT is doing its best in enhancing the quality of education and working hard to make students ready for the industrial revolution. Great team is operating the plans to achieve the goal to make this Institute the face of education system.

"We have the best team, we have resources, we have brilliant students, so let's change the world".

Nishant Tripathi
Chairman, SSIPMT, Raipur

It is a privilege to be the Principal of SSIPMT, Raipur, an Institution that stands for excellence and quality. Since its inception in 2008 the institution has bagged a University Gold Medal and has to its credit a number of branch toppers. For me, education does not mean providing answers, it means equipping the pupil with the means to find the answers for himself and within himself.

My aim is not only to be an able administrator but also to be a friend, philosopher and guide to students one on whom they can count on and trust at all times. I assure you that my doors will always be open to the students and their parents for any suggestion or guidance.

Dr. Alok Jain
Principal, SSIPMT, Raipur

I congratulate all my students for their efforts and their hardwork towards the growth of knowledge and their success and I even congratulate our elite group of faculty for their time and patience and their efforts to impart the knowledge of latest technologies and their working to upbring a great enginer within.

With the growth of industry needs we aim to better our students by introducing to them the latest technology like Cloud Computing etc.

Dr. J.P. Patra
HOD (CSE), SSIPMT, Raipur

ABOUT OUR DEPARTMENT

We produce quality engineers with the knowledge of latest technologies and industrial trends and knowledge to meet the developing needs of the growing industries and society.

OUR FACULTY MEMBERS

Mr. Riju Bhattacharya
Asst. Professor

Mr. Anand Tamrakar
Asst. Professor

Mrs. Preeti Tuli
Asst. Professor

Mr. Siddharth Shukla
Asst. Professor

Mrs. Sumitra Samal
Asst. Professor

Mr. Ashish Trivedi
Asst. Professor

Mr. Tansen Patel
Asst. Professor

Mr. Rajesh Deshmukh
Associate Professor

Mr. Gurudatta Verma
Asst. Professor

Mr. Sunil Dewangan
Asst. Professor

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MEMORANDUMS

FUTURE AND PRESENT OF CLOUD COMPUTING!

Mr. Riju Bhattacharya
Asst. Professor
CSA
SSIPMT, Raipur

The future of the cloud is a profoundly diverse hybrid cloud computing model in which detached workload can flex up or down span several open clouds, be moved whenever and be made to do with a single arrangement of controls. Ventures have attempted to fabricate an IT setup that is sufficiently responsive to run at the speed of business

The prospect of the cloud computing is a unique design based on the Computing Cell that reliably gives best-of-breed software set-ups, including encryption, verification, network carving, data integrity and data organization across several open clouds.
It even empowers the relocation of existing undertaking controls and enables current strategies to be reached out across jobs. The hybrid cloud based on the Computing Cell essentially shows up as an increasingly flexible and robust expansion of an enterprise's private cloud framework.
"Another key aspect of hybrid cloud computing implies that organizations will leverage multiple cloud platforms such as AWS, Azure and Google Cloud Platform. This multi-cloud mode of operation promises to help organizations avoid lock-in to a single provider but also introduces additional complexity, as IT staff need to become comfortable operating in more than one cloud platform environment."

Mrs. Preeti Tuli
Asst. Professor
CSA
SSIPMT, Raipur

A cloud allows users to access application, information and data of all sorts on an online level rather than by use of actual hardware or devices.

A company offering reliable cloud technology allows for computing to be done in a much more shared way, as a cloud provides a service rather than a product. User get and share their information in a way that can allow them to access and give access to the whole world or any group of people within their cloud.

Find out the hidden cloud vendors' names!

1. AMAZON 2. GOGRID 3. CITRIX 4. IBM 5. AZURE

6. ORACLE 7. GOOGLE 8. BOSH 9. CLOUDANT

10. VMWARE 11. KAMATERA 12. ADOBE

B	A	I	C	J	E	N	H	I	D
O	E	L	G	O	O	G	R	S	L
S	K	M	N	Z	P	G	Q	Z	N
H	U	F	A	D	O	B	E	Y	X
X	W	M	P	G	O	R	X	F	A
I	A	V	O	R	A	C	L	E	Z
R	G	O	C	W	A	B	Z	E	U
T	K	A	M	A	T	E	R	A	R
I	H	V	K	J	I	B	M	I	E
C	L	O	U	D	A	N	T	Q	S

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CLOUD COMPUTING

What is cloud computing?

Simply put, cloud computing is the delivery of computing services—servers, storage, databases, networking, software, analytics, intelligence and more—over the Internet ("the cloud") to offer faster innovation, flexible resources and economies of scale. You typically pay only for cloud services you use, helping lower your operating costs, run your infrastructure more efficiently and scale as your business needs change.

Most cloud computing services fall into four broad categories: infrastructure as a service (IaaS), platform as a service (PaaS), serverless and software as a service (SaaS). These are sometimes called the cloud computing stack because they build on top of one another. Knowing what they are and how they are different makes it easier to accomplish your business goals.

You are probably using cloud computing right now, even if you don't realise it. If you use an online service to send email, edit documents, watch movies or TV, listen to music, play games or store pictures and other files, it is likely that cloud computing is making it all possible behind the scenes. The first cloud computing services are barely a decade old, but already a variety of organisations—from tiny startups to global corporations, government agencies to non-profits—are embracing the technology for all sorts of reasons.

Top 5 trends that will shape cloud in 2017

2016 has been an inflection point for cloud computing. The cloud-centric IT landscape is unleashing major forces for change in legacy systems, business models, and IT infrastructure management. The cloud market will grow at a scorching pace in 2017 as organizations shift cloud efforts into high gear to power their core business systems while enabling their customer-facing applications.

1. Next-Gen Clouds Running on Hyper-Converged Infrastructure
Evidently, the pre-integrated, consolidated compute and storage resources of hyper-converged infrastructure (HCI) solutions help cloud implementations run faster, scale higher and respond quicker. It is well suited for new workloads that demand rapid and automated scale-up and scale-out. Forrester believes hyper-converged infrastructures should be the foundation for the development of private cloud networks, ensuring effortless and effective implementations.

2. Containers-as-a-Service Going Mainstream
As microservices and containerized workloads go mainstream, new categories such as container management, orchestration, security, logging, monitoring etc are driving conversations pertaining to public cloud deployments. Undoubtedly, containers-as-a-service is well placed to emerge as the fastest growing delivery model in the public cloud. It is quite likely to witness that container-driven software code management will rise along with Linux containers that may soon become available in most of the public and private cloud platforms in 2017.

3. Adoption of Lift-And-Shift Cloud Migration Model
"In 2017, lift-and-shift migration tools will accelerate the rate of cloud migration, given their low cost for bulk application migrations," Bartoletti says. For example, instead of looking to simply dump existing apps onto public cloud, organizations would leverage migration solutions and services to recalibrate apps to take advantage of cloud's elasticity.

4. Asia-Pac Cloud Providers to Gain Foothold While Niche Players Make Their Mark
Growing at a CAGR of 22 percent, the global public cloud market will reach $146 billion in 2017, up from $87 billion in 2015. While a large part of this market will be serviced by dominant MNC players, they will not be able to service every unique request of the enterprise customers. This will create enough and more elbow room for regional, niche players.
In 2017, SaaS will move towards regional and industry solutions instead of the industry behemoths. In fact, the niche cloud providers are better poised to offer customizable, hybrid solutions available for organizations have specific compute and processing needs.

5. Cloud Management Platform and Cloud Service Brokers on The Rise
Industry reports suggest that enterprises today dabble with at least six variants of cloud on an average, with three being in a production environment and the rest in dev/test areas. As organizations continue to deploy a number of clouds across various providers to meet specifically unique requirements or for risk mitigation, IT teams are beginning to develop the cloud management headache.
That's why in 2017, enterprises will increasingly leverage new cloud management platforms and services to manage various variants of their cloud instances across providers, audit cloud functions, and monitor and control the platforms. Along with cloud management platforms' SIAM (service integration and management) controls, organizations will also see the rise of a new role: cloud service broker, a service provider that will help define and determine the optimum approach to cloud

Cloud Computing Architecture
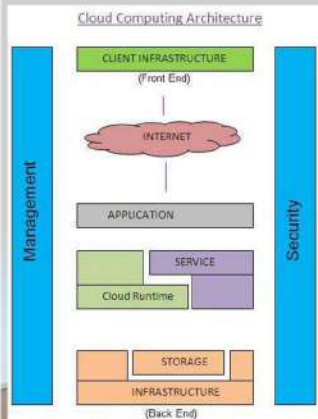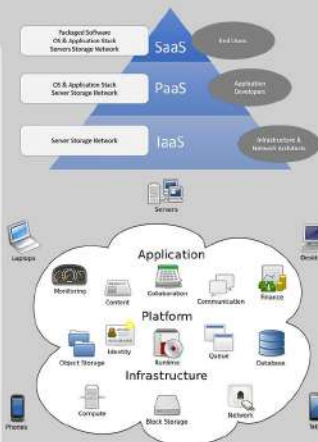
5 cloud computing trends to prepare for in 2018

1. Exponential growth in cloud services solutions
Software as a Service (SaaS) opened a flexible and financially attractive door for businesses and consumers to try early cloud services. The growth of infrastructure and platform as a service (IaaS and PaaS, respectively) has expanded the number of cloud solutions available in the public and private sectors. In 2018, we expect to see many more organizations take advantage of the simplicity and high-performance the cloud guarantees.2018 will see SaaS solutions take the cake as the most highly deployed cloud service across the globe. The Cisco survey also forecasts that SaaS will account for 60% of all cloud-based workloads—a 12% increase over 2017 predictions. PaaS solutions will experience a modest five percent growth rate, while IaaS solutions are also set to increase.

2. Increased cloud storage capacity
As cloud services increasingly become a de facto part of doing business, we expect data storage to grow exponentially in the coming year. To accomplish this, service providers will bring more data centers online with larger-capacity storage equipment. The Cisco survey estimates that in 2017, the total amount of data stored in data centers would be 370 EB, while global storage capacity would reach 600 EB. These numbers are set to grow in 2018 to an estimated total storage capacity of 1,1 ZB, which is approximately twice the space available in 2017.While data centers owners move to increase available storage,forward-thinking businesses will be able to take advantage of that space to further their objectives. For small businesses, increased storage capacity means that 2018 will provide custom or bespoke storage options at far lower prices than were available in 2017.

3. The Internet of Everything (IoE) will take center stage
In 2017, the internet of things (IoT) and artificial intelligence played a stellar role in the tech community, with respected innovators like Elon Musk and Stephen Hawking commenting on their near-term potential. While industry experts anticipate IoT will see its own growth, continuous innovations in real-time data analytics and cloud computing are set to push the internet of everything (IoE) to the fore in 2018. IoE relies on machine to machine communications, data, processes, and how humans communicate with everything in their environment. Cloud computing will play a significant role as the IoE develops into complex systems aimed at simplifying all interactions. IoE will also provide businesses with more insight into how consumers relate to their products or services, customer care units, and one another. This data can then be used in multiple ways, including simplifying customer experience through automation and the use of smart robots. Japanese hospitality robots, which are imbued with the ability to welcome guests, converse in real-time, and provide certain services, give a sneak peek into what IoE could accomplish in the near future.

4. Enhanced internet quality and the rise of 5G
Qualcomm Snapdragon has been spearheading the move to faster network speeds, and 2018 should see an increase in the number of groups working on these improvements. As this work gains momentum, we anticipate strong movement from gigabyte LTE speeds to full 5G networks, helping us reach 5G capabilities in record time.
Enhanced network quality will increase consumer expectations for highly-responsive, fast-loading services and apps. Savvy business owners will move quickly to reevaluate and upgrade their SaaS, PaaS, and website platforms to be more responsive. The IoT and IoE industries will also benefit from faster network speeds by allowing organizations in this space to receive and deliver data more efficiently in real time.

5. Security challenges and the cloud
Attacks such as the WannaCry ransomware, the CIA Vault 7 hack, and the Equifax data breach are reminders that cyber attacks are a reality of the 21st century. We expect 2018 will see more individual and state-sponsored attacks aimed at undermining the security of cloud infrastructures. As cyber attackers become more sophisticated, security analysts in government, public, and private sectors will also have to become more sophisticated and timely in their methods for detecting and preventing attacks. Businesses will recognize the necessity of investing in tools like security information and event management (SIEM) and malware detection systems as fundamental defense mechanisms for cyber security.

"We believe we're moving out of the Ice Age, the Iron Age, the Industrial Age, the Information Age, to the participation age. You get on the Net and you do stuff. You IM (instant message), you blog, you take pictures, you publish, you podcast, you transact, you distance learn, you telemedicine. You are participating on the Internet, not just viewing stuff. We build the infrastructure that goes in the data center that facilitates the participation age. We build that big friggin' Webfone switch. It has security, directory, identity, privacy, storage, compute, the whole Web services stack." - Scott McNealy, former CEO, Sun Microsystems

"Ultimately, the cloud is the latest example of Schumpeterian creative destruction: creating wealth for those who exploit it; and leading to the demise of those that don't." - Joe Weinman, Senior VP at Telx and author of Cloudonomics: The Business Value of Cloud Computing

ACTIVITIES AND PLACEMENTS

EVENTS

A number of events are organized by our society and the whole Computer Science & Engineering department comes together to make every activity a successful one. We have conducted various competitions such as Coding, Football, PC games, Mobile games, Athletics, etc. in which students from any branch can participate and workshops on IOT, Cloud Computing and BIGDATA. We have successful company campus drives and wherever our students go they hoist their flags high.

SHANKARACHARYA RAIPUR www.ssipmt.com
Congratulations! To all OUR Students, Parents & Faculties

No. 1 Once again SSIPMT Raipur tops the CSVTU University Results of BE 8th Semester, declared on July 2017

CONGRATULATIONS FOR SUCCESS!

OUR PLACEMENTS 2017

Purnima Tandon (Tech Mahindra) | Rahul Dewangan (Cognizant) | Ritu Agrawal (Tech Mahindra) | Dalejan Nirmalkar (Incred) | Anuja Swami (Excellone) | Pankaj Gupta (Tech Mahindra)

Shweta Ramesh (Tech Mahindra) | Diksha Meshram (DXC. Technology) | Devendra Dewangan (Tech Mahindra, ClickLabs) | Deepti Tekwani (Collabera) | Prachi Gupta (Tech Mahindra)

Srishti Bachwani (Tech Mahindra) | Shivansh Tiwari (GenPact) | Vinit Agrawal (Tech Mahindra) | Aanchal Agrawal (Tech Mahindra) | Namrata Narshinghani (Tech Mahindra) | Harshita Chandra (GenPact)

GALLERY

ACHIEVEMENTS

NAME	BRANCH	EVENT	MEDAL/POSITION	NAME	BRANCH	EVENT	MEDAL/POSITION
SANIYA SONI	CSE-3RD	TABLE TENNIS	WINNER	PRIYANKA KASHYAP	CSE-3RD	LONGJUMP (ATHLETICS)	GOLD MEDAL (1ST)
NEELIMA THAKUR	CSE-3RD	HANDBALL	RUNNERUP	AYUSH PANDEY	CSE-1ST	VOLLEY BALL	WINNER
VARKHA SHIVHARE	CSE-3RD	HANDBALL	RUNNERUP	DARAKSHAN NAAZREEN	CSE-3RD	400M	SILVER (2ND)
HRISHITA SINGH	CSE-3RD	HANDBALL	RUNNERUP	DARAKSHAN NAAZREEN	CSE-3RD	100M (ATHLETICS)	SILVER (2ND)
GODAVARI CHAUHAN	CSE-5TH	VOLLEYBALL	RUNNERUP	DARAKSHAN NAAZREEN	CSE-3RD	4x100M RELAY RACE	SILVER (2ND)
PRERNA SAHU	CSE-5TH	VOLLEYBALL	RUNNERUP	VARKHA SHIVHARE	CSE-3RD	4x100M RELAY RACE	SILVER (2ND)
NANDINI SOUNDIK	CSE-5TH	VOLLEYBALL	RUNNERUP	RUPA JHA	CSE-3RD	4x100M RELAY RACE	SILVER (2ND)
BIPIKA VARMA	CSE-3RD	VOLLEYBALL	RUNNERUP	PRIYANKA KASHYAP	CSE-3RD	4x100M RELAY RACE	SILVER (2ND)
PRINCE DUTTA	CSE-7TH	CRICKET	RUNNERUP	UJJWALA KATAKWAR	CSE-3RD	TABLE TENNIS	WINNER

Upcoming cover theme for Jan-June 2018 issue is BIGDATA

Students may submit their articles in categories such as technical, trends, interesting facts, small technical game
Please send your work in MS Word format to the editor in chief, Asst.Professor Taniya Jain in the email ID cse.newsletter@ssipmt.com with the details of the sender (name, semester, branch).
Please note that Cyber Trinity is a newsletter for members of large and not a journal for publishing full-fledged research papers. Therefore we expect articles written at the level of general audience.