

#### DIGIFLASH

Department association of CSE proudly presents

## DIGITIMES



## CHIEF EDITOR'S PAGE

IT field has been playing a dominant role in all other fields and it will be even more powerful in the future because of its increasing innovations. We, the IT people can claim that we are boundless innovators and the creators of the new world. We are much delighted in presenting you the technology such an innovation Holo 2.0 the wearable computer and some other technical stuffs. In addition this volume will be focusing on UTSAV2K14, our grand event. Enjoy the ultimate technical feast.

With best regards

T.E.MATHAN
PRESIDENT - DIGIFLASH

CHIEF EDITOR

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## Department of CSE



#### VISION

 To develop engineers with global employability, entrepreneurship capability, research focus and social responsibility.

#### MISSION

- To develop internationally competent engineers in dynamic IT field byproviding state-of-art academic environment and industry driven curriculum.
- To motivate and guide students to take up higher studies and establish entrepreneurial ventures.
- To enrich the department through committed and technically sound faculty team with research focus in thrust areas.
- To undertake societal problems and provide solutions through technical innovations and projects in association with the industry, society and professional bodies.

#### PEO s

Graduates of this program will

 Possess sound knowledge to Identify, analyze and investigate real world problems, provide concrete solutions & products using latest technologies.



Mission & Vision

rision

- Apply computing expertise to solve societal and environmental issues in an ethical manner.
- Exhibit lifelong learning, Communication and project management skills to meet the demands of IT field.

#### Programme Outcome:

- (a) Graduates will exhibit the knowledge of Fourier series, boundary value problems, probability modeling and queuing theory, automata, physics and chemistry.
- (b) Graduate will demonstrate an ability to identify formulate and solve computational problems.
- (c) Graduates will exhibit an ability to develop algorithms, implement programs and evaluate the performance.
  - (d) Graduate will exhibit an ability to analyze the requirement, design and develop software.
  - e) Graduate will exhibit an ability to work on laboratory and multi-disciplinary Tasks.
  - (f) Graduate will exhibit skills to use design and development tools and software to analyze problem.
- (g) Graduate will exhibit knowledge of professional and ethical responsibilities.
- (h) Graduate will be able to communicate effectively in both verbal and written form.
- Graduate will realize the importance of applying engineering solutions to social development.
- (j) Graduates will have a tendency for continual self - learning.

## Top 10 Strategic IT Trends For 2015

IT experts have identified what they believe to be the top-ten information technology trends for the year ahead. Strategic technology trends are defined as having potentially significant impact on organizations in the next three years. Here is a summary of the trends:

#### 1. Computing Everywhere

With the continued advancement smart-phone technology, Gartner assesses that an increased emphasis on serving the needs of the mobile user in diverse contexts and environments, as opposed to focusing on alone. Gartner posits devices smart-phones and wearable devices are part of a broader computing offering to include connected screens in the workplace and in public spaces. User experience design will be of critical importance.



#### 3. Advanced, Pervasive, Invisible Analytics

Analytics will continue to advance due to the Internet of things and the embedded devices that trend will continue to foster. Vast pools of structured and unstructured data inside and outside organizations will continue to be generated. Gartner points out that every app will need to be an analytic app. The analysis also concludes that big questions and big answers are more important than big data.



#### 2. The Internet of Things (IoT)

The Internet of Things will continue to expand, propelled by the ubiquity of user-oriented computing. Gartner posits that this will be replicated both in industrial and in operational contexts, as it will be the focus of digital business products and processes. Embedding technology more deeply will create touch points for users everywhere. This will form the foundation of digital business.

#### 4. 3D Printing

The cost of 3D printing will decrease in the next three years, leading to rapid growth of the market for these low-cost machines. Industrial use will also continue its rapid expansion. Gartner highlights that expansion will be especially great in industrial, biomedical and consumer applications, highlighting the extent to which this trend is real, proving that 3D printing is a viable and cost-effective way to reduce costs through improved designs, streamlined prototyping and short-run manufacturing.

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#### 5. Context-Rich Systems:

Embedded intelligence that is ubiquitous combined with pervasive analytics will foster the development of systems that are alert and responsive to surroundings. Gartner highlights that context-aware security is an early application of this trend, but that others will emerge.

#### 7. Cloud/Client Architecture

Mobile computing and cloud computing continue to converge and lead to the growth of centrally coordinated applications that can be delivered to any device. Gartner notes that cloud computing is the foundation elastically scalable, self-service computing for internally and externally both applications. Apps that use intelligence and storage of client device effectively will benefit from lowering bandwidth costs, coordination and management will be based on the cloud. The analysis goes on to note that over time applications will evolve to simultaneous use of multiple devices. In the future, games and enterprise applications alike will use multiple screens and exploit wearables and other devices to deliver an enhanced experience.

#### 9. Web-Scale IT

Gartner notes that more companies will think, act, and build applications and infrastructure in the same way that technology stalwarts like Amazon, Google GOOGL +0.31%, and Facebook do. There will be an evolution toward web-scale IT as commercial hardware platforms embrace the new models and cloud-optimised and software-defined methods become mainstream. Gartner notes that the marriage of development and operations in a coordinated way (referred to as DevOps) is the first step towards the web-scale IT.

#### 6. Smart Machines

Analytics combined with an understanding of context will usher in smart machines. Advanced algorithms will lead to systems that learn for themselves and act upon those learnings. Gartner notes that machine helpers will continue to evolve from the existing prototypes for autonomous vehicles, advanced robots, virtual personal assistants and smart advisors. The analysis goes on to speculate that the smart machine era will be the most disruptive in the history of IT.

## 8. Software-Defined Infrastructure and Applications

Agile development for methods programming of everything from infrastructure basics to applications essential to enable organizations to deliver the flexibility required to make the digital defined business work. Software networking, storage, data centers and security maturing. are Application programming interface (API) calls render cloud services software configurable, and applications have rich APIs to access their function and content programmatically.

#### 10.Risk-Based Security and Self-Protection

Lastly, the analysis concludes that security will remain an important consideration through this evolution toward the digital future, but it should not be so heavy-handed as to impede progress.

#### REFERENCE:

http://www.forbes.com/sites/peterhigh/2014 /10/07/gartner-top-10-strategic-it-trends-for-2015/



## Computer Science, The Future of Education

From the cell phone alarm that wakes them to the tablets used to chat with friends and complete homework, today's students are surrounded by computer technology. It is ubiquitous, and critical to daily routines. Yet few understand how technology works, even as it becomes ever more intrinsic to how we solve business and community challenges.

Today, computer science helps retailers determine how to grow sales, and it ensures that law enforcement officers are in the right places to maintain public safety. It is the foundation for the smart grid, and it fuels personalized medicine initiatives that optimize outcomes and minimize treatment side effects. Computing algorithms help organizations in all industries solve problems in new and more effective ways.

#### Inseparable from the Future of Education:

According to the U.S. Bureau of Labor Statistics, by 2020 there will be 1.4 million new computer science jobs. However, between current professionals and university students, we will only have 400,000 computer scientists trained to fill those roles.

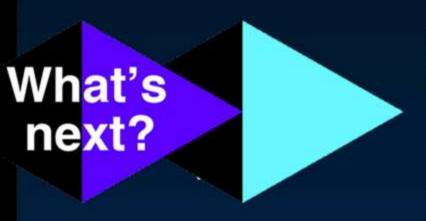
Since it can take as many as 25 years to create a computer scientist, and since computer science skills are becoming increasingly integral for jobs in all industries, this skills gap is on track to emerge as a formidable economic, security, and social justice challenge in the next few years. Teachers, schools, parents, and industry must act on multiple fronts to address student readiness, expand access to computer science curriculum and opportunities, and help foster interest in computer science.

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#### Tackling the Challenges:

Even though computer science skills are becoming increasingly important in the competitive global economy, there are some significant roadblocks that prevent schools from incorporating computer science into the curriculum and exposing more students to the subject.

Currently, very few schools make computer science available to students. According to the College Board, in 2013, only 9 percent of schools offered the AP computer science exam. This lack of course offerings is compounded by the fact that there is a significant lack of teachers who are qualified to engage students in computer science -those who have a deep knowledge of the topic often take jobs in industry -- and a lack of student interest in taking these advanced courses, at least partly due to a misconception that computing experts are boring, male, and always in front of their computers. Overall student engagement numbers are low even relative to other STEM fields, and female and minority students in particular are vastly underrepresented in existing computer science courses.



#### 4 Steps for Taking Action Now

While a comprehensive, long-term plan is needed to incorporate computer science education in all schools and to ensure that students are prepared for the jobs of 5tomorrow, there are five simple steps that teachers, schools, parents, and industry can take today to integrate computer science into the

classrooms and begin to overcome the above-mentioned challenges:

#### 1. Professional Development

Teachers can register for online or in-person teacher training courses to learn how to teach a computer science curriculum or integrate basic computer science principles into existing lesson plans.

#### 2. Career Education

Parents, teachers, and schools can educate students about the career opportunities available to those who get computer science degrees. While it could mean working for technology giants like Apple and Oracle, students can also use computer science skills to advance healthcare research or help a non-profit build a case for government funding.

#### 3. Student Incentives

Teachers can offer students extra credit for using free online learning tools to develop basic computer science skills and create a project. (A good place to start is the Computer Science Teachers Association.)

#### 4. Mentor Programs

Industry and schools can formalize a mentorship program that will encourage and support students to learn more about computer science and develop their skills inside and outside the classroom -- via after-school programs or co-taught lessons.

#### REFERENCE:

http://www.edutopia.org/blog/computer-scien ce-future-of-education-alison-derbenwick-mi ller

#### DIGITIMES November 2014 -> 05



### QUIZ CHAMP

- 1. The unit of speed used for super computer is
- A. KELOPS
- B. GELOPS
- C. MELOPS
- D. None of these
- 2. DNS refers to
- A. Data Number Sequence
- B. Digital Network Service
- C. Domain Name System
- D. Disk Numbering System
- 3. What did Galileo invent?
- A. Barometer
- B.Pendulum Clock
- C. Microscope
- D. Thermometer
- 4. In which decade was the first solid state integrated circuit demonstrated?
- A. 1950s B. 1960s C.1970s D. 1980s
- Abbreviation of EDI.
- 6. Abbrevation of UHNW.
- 7. The computer that is not considered as a portable computer is
- A. Laptop computer
- B. Mini computer
- C. Notebook computer
- D. None of these
- The first movie released in 1982 with terrific computer animation and graphics was
- A. Star wars
- B. Tron
- C. Forbidden planet
- D. Dark star

- Graphic interfaces were first used in a xerox product is called
- A. Ethernet
- B. Inter LISP
- C. Small talk
- D. Zeta LISP
- 10.\_\_\_\_\_ is need to build dynamic web documents.
- A. CGI B. Java
- C. HTML D. All of the above
- 11. Wilson Jones is associated with
- A. Hockey
- B. Golf
- C. Billiards
- D. Air-race
- 12. The term"Googly" is associated with
- A. Cricket
- B. Football
- C. Badminton D. Hockey
- 13. This statesman, politican, scholar, inventor, and one of early presidents of USA invented the swivel chair, the spherical sundial, the moldboard plow, and the cipher wheel.
- A. George Washington
- B. Alexander Hamilton
- C. John Adams
- D. Thomas Jefferson
- 14. What is the name of the CalTech seismologist who invented the scale used to measure the magnitude of earthquakes?
- A. Charles Richter
- B. Hiram Walker
- C. Giuseppe Mercalli
- D. Joshua Rumble

For answer refer page ---> 09

## **Top 15 Free Online Resources**

Attending a college with the aim of acquiring a degree in our chosen course is the best way to go forward. But you must also make yourself aware of the number of freely available resources on the Internet that can help you in developing your basic skills.



1. MIT OpenCourseWare: This has the widest collection of open courseware along with a number of offerings in computer science from some of the pioneers in the field.

Website:

http://ocw.mit.edu/courses/#electrical-engineering-and-computer-science

2. Stanford Engineering Everywhere: You can opt for online courses in basic computer science, artificial intelligence, linear systems along with other engineering topics here.

#### Website:

http://see.stanford.edu/see/courses.aspx

3. Academic Earth: This site has over 12 free lectures on computer science from renowned colleges like Stanford, MIT, and Berkeley.

#### Website:

http://academicearth.org/online-college-courses/

4. MIT World: This site offers lectures, conferences, and demonstrations on a wide range of topics, including computer science.

Website: http://video.mit.edu/

Harvard Extension School: This provides access to some of the free Ivy League educational resources collecting course materials from a host of different computer science courses having been held over the past years.

Website: http://cs50.tv/2011/fall/

6. UC Berkeley Engineering: You can look into UC Berkeley's iTunesU archive for an amazing collection of computer science and engineering lectures.

Website: https://itunes.apple.com/us/itunes-u/engineering-7-001-fall-2009/id354821676

7. The Open University: This is a great place to search for free educational resources on any topic with a good amount of computer science material too.

Website: http://www.open.edu/itunes/

8. UC Irvine: By using UC Irvine's online resources, you can get intro to AI, Machine Learning, Kernel-Based Learning, or Bayesian Statistical Analysis.

Website: http://ocw.uci.edu/search/results/keyword/index

w3schools: The site has tutorials to learn HTML, CSS, AJAX, and a number of other programming languages.

Website: http://www.w3schools.com/

10. Wikibooks: This site helps you in supplementing any of the courses undertaken by you for free online with the help of textbooks from Wikibooks.

Website: http://en.wikibooks.org/wiki/Subject:Computer science

11. Google Code University: This has a host of resources to assist computer science students with courses on programming, web security, algorithms, and a lot more.

Website: https://developers.google.com/university/

12. ArsDigita: This is based on the undergrad computer science program at MIT and offers good courses worth checking out.

Website: http://aduni.org/courses/

 Grinnell College: You can find a number of computer science classes taught at Grinnell between 1997 and to date over here.

Website: http://www.cs.grinnell.edu/~rebelsky/Courses/

14. Codeacademy: For assistance in learning a coding language, you can check out this site for guidance to make everything easier.

Website: http://www.codecademy.com/#%21/exercises

15. Saylor.org: This is an introductory course in computer science utilizing great free resources on the site Website: http://www.saylor.org/majors/computer-science/

Reference

http://www.efytimes.com/e1/fullnews.asp?edid=118833



#### FUTURE WERRABLE COMPUTER FOR EDIS

What do you imagine for the next generation computer in the year 2015?

Here are some hints: it's going to be wearable, fashionable, equipped with ecological power source, holographic display, and of course, connected anytime anywhere. HOLO 2.0 is a project designed to be the next computer replacement for the future. This wearable computer offers a new user experience with its portability and ground breaking architecture. This multi function gadget allows you to keep connected to the web whenever, wherever!

HOLO 2.0 uses kinetically chargeable battery, the power source is generated from the kinetic movements of your hand. It features an interactive holographic display to establish a connection between the user and the device itself. Could we change it into a desktop computer? Well, yes, this device comes with a docking station to emit a larger holographic display which you can use as a desktop computer display at the convenient of your home or office. The main strength of this gadget is its minimal size but with a complete function as a laptop. The dimension is: 140mm .((length), 20mm (width), 2.5mm (minimum thickness), and 10mm (maximum thickness)

#### ANSWER FOR QUIZ:

- 1. B. GELOPS
- 2. B. Digital Network Service
- 3. D. Thermometer
- 4. A.1950s
- Education Development Index
- 6. Ultra High Net Worth
- 7. B. Mini computer
- 8. A. Star wars
- 9. A. Ethernet
- 10. D. All of the above
- 11. C. Billiards
- 12. A. Cricket
- 13. D. Thomas Jefferson
- 14. A. Charles Richter



## The 10 Highest-Rated Tech Company CEOs

### 1. Jeff Weiner — LinkedIn

Soaring in at the top overall spot with a 100% approval rating is LinkedIn's Jeff Weiner. He's been at the company since 2008, and received great reviews from former employees (who prefer to remain anonymous through Glassdoor).

"The CEO is what helps spread the culture. He emphasizes culture," a LinkedIn associate web developer said.



IMAGE: FLICKR, LANCE NISHIHIRA

### Paul Jacobs\* — Qualcomm



IMAGE: FLICKR, WORLD ECONOMIC FORUM

On the overall company list, Jacobs actually ranked fourth, but was lifted to second place in the tech realm. He nabbed a 95% rating at Qualcomm, which makes wireless telecommunications products.

"Visionary leader, great technology portfolio and offers opportunities to work on many different projects," a Qualcomm senior learning and development specialist said.

#### Brad Smith — Intuit



IMAGE: FLICKR, JD LASICA

Smith placed sixth overall, but third on the tech list. Intuit's CEO since 2008, his employees at the software company give him a 94% approval.

"At the very top, Brad Smith and team are well-respected and keep things moving in the right direction," an anonymous Intuit employee said.

### 4. Mark Zuckerberg — Facebook

In 2013, Zuckerberg was rated the top CEO overall, with a 99% approval rating. This year, the face of Facebook pulls in at fourth on the tech company list (ninth overall) with a 93% rating. "Mark is an incredible leader who wants to make the world a better place, and I love doing work for a mission I care about," a Facebook analyst



IMAGE: FLICKR, JD LASICA

## Larry Page — Google



IMAGE: SETH WENIG/AP/ASSOCIATED PRESS

Page pulled in at 10th overall, but cut that in half on the tech side. Google's CEO (and co-founder) maintains a 93% approval rating. Despite the search engine's dominant global presence, Page keeps things low-key.

"Larry wants us to keep the soul of a startup, even though we no longer are one," an anonymous Google software engineer said.

#### Marc Benioff — Salesforce.com

Benioff wears a lot of hats at Salesforce.com. He's the cloud computing company's co-founder, chairman and CEO. He ranked 12th overall, but sixth on the tech list, approval with a 93% rating. "Marc is the best CEO in the business — different for sure — but best." the an anonymous Salesforce said. employee



IMAGE: FLICKR, JD LASICA

## Jerry Kennelly — Riverbed Technology



IMAGE: MARK LENNIHAN/AP/ASSOCIATED PRESS

Jerry Kennelly was lucky number 13 on the full list, but lands the seventh spot on the tech list. The CEO and chairman of Riverbed, an application performance company founded in 2002, landed a 93% approval rating.

"Jerry is a fantastic CEO with tons of enthusiasm and

cares greatly about his company and people. Couldn't possibly be any nicer of a human being running a \$1B company on this earth," a Riverbed technology sales employee said.

The heir to the Steve Jobs throne was 17 overall, but seized the eighth tech spot. Cook whipped up a 92% approval rating, a slight drop from last year's 93%. "You feel like everything you do has a direct impact and you're a stakeholder," a front-end engineer said. "The VPs and CEO are not removed either. It's common to see them eating lunch on campus amongst everyone else."

### Tim Cook — Apple



IMAGE: MARCIO JOSE SANCHEZ/ASSOCIATED PRESS

### 9. John Donahoe — eBay



IMAGE: FLICKR, EBAYINK

The president and CEO of eBay since 2008, John Donahoe's actual ranking was at spot 19 in the top 50. He snagged a 91% approval and warm from praise employees. "The CEO of the company is smart, passionate and sincere. John Donahoe is the real deal and a great leader. He may be the most approachable CEO I've ever met," an director eBay said.

## Frank D'Souza — Cognizant Technology Solutions



D'Souza holds the 24th spot of the 50 highest rated CEOs, with a 90% approval. He's been the top exec at Cognizant since 2007, which, at 38, made him the youngest CEO of a billion-dollar IT company.

IMAGE: FLICKR, COGNIZANT TECHNOLOGY SOLUTIONS

Reference

http://mashable.com/2014/03/21/top-tech-ceos/







UTSAV2K14 EVENTS
IT IS AN INTRACOLLEGE TECHNICAL
SYMPOSIUM CONDUCTED FOR IT
STREAMS (CSE IT MCA) BY MCET-CSI
(COMPUTER SOCIETY OF INDIA) AND
DIGIFLASH(ASSOCIATION OF
COMPUTER SCIENCE AND
ENGINEERING)

## I YEAR EVENTS(CSE,IT)



1.Event Name: Ratsal-1

Time: 10.00 am to 11.30 am

Venue: EEE Seminar Hall

Description: This event consists of three

technical rounds.

The preliminary round consists of crossword puzzle .Round1 is Revealing the Technologies and Techniques through clues.Round2 consists of cache speicher which is a memory test.

2.Event Name: Connexion-1 Time: 10.00 am to 11.30 am

Venue: NPT Hall No.1

Description: This event consists of

three technical rounds.

The preliminary round is test your

RAM .Round1 is

Connections.Round2 consists of

JAM(Just a minute).



3.Event Name: Best Leiter Time: 10.00 am to 11.30 am

Venue: NPT Hall No.12

Description: This event consists of

three technical rounds.

The preliminary round is JAM(Just a minute) .Round1 is Technological

words finding and

translation.Round2 consists of

Marketing on trending technologies

4.Event Name: Code master Time: 10.00 am to 11.30 am

Venue: CSE lab-3

**Description:** This event consists

of three technical rounds.

The preliminary round is
Objective type(c,c++)..Round1
consists of Reverse
coding.Round2 consists of
problem solving questions.







5.Event Name: Chart presentation

Time: 10.00 am to 11.30 am

Venue: CS Hall Description:

The students are asked to prepare a chart about recent technical topics and they are asked to present it with their team members.



## II YEARS (CSE, IT)

1.Event Name: Ratsal-2 Time: 2.00 pm to 4.00 pm Venue:EEE Seminar Hall

Description: This event consists of

three technical rounds.

The preliminary round consists of crossword puzzle .Round1 is Revealing the Technologies and Techniques through clues.Round2 consists of cache speicher which is a memory test.

2.Event Name: Connexion-2 Time: 2.00 pm to 4.00 pm

Venue: Mechanical seminar hall.

Description: This event consists

of three technical rounds.

The preliminary round is test your

RAM .Round1 is

Connections.Round2 consist of

JAM(Just a minute).



3.Event Name: Hard where Time: 2.00 pm to 4.00 pm

Venue: Cse lab-1

Description: This event consists of

three technical rounds.

The preliminary round consist of objective type questions .Round1 is the students need to explore the hardware parts through the clues.Round2 consist of hardware troubleshooting.



4.Event Name: Codage Time: 2.00 pm to 4.00 pm

Venue: CSE lab-1

Description: This event consists

of three technical rounds. The preliminary round is Objective type(c,c++)..Round1 consists of Reverse coding.Round2 consists of problem solving questions.



5.Event Name: Polyvalent-1 Time: 2.00 pm to 4.00 pm

Venue: CSE lab-3

Description: This event consists of three

technical rounds.

The preliminary round is Objective type(All domains in IT)..Round1 consists SDLC(Software development

lifecycle).Round2 consists of problem

solving questions.

### III YEARS(CSE,IT,MCA)

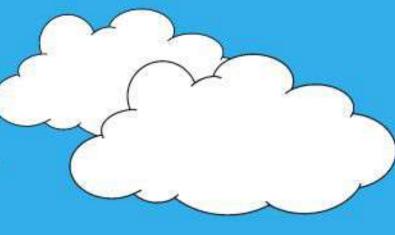
1.Event Name: Photo Mania Time: 10.00 am to 11.30 am

Venue: CSE lab-1

Description: This event consists of

three technical rounds.

The preliminary round is Objective type questions.Round1 is recharacterization.In Round2 the students need to design the poster for the given theme.



3.Event Name: Spin a web Time: 10.00 am to 11.30 am

Venue: CSE lab-1

Description: This event consists of

three technical rounds.

The preliminary round is Objective type questions(c,c++)..Round1 consists of HTML Tags.Round2 is with the given topics and tags the students are asked to create the website effectively.

2.Event Name: Select \* from brain

Time: 10.00 am to 11.30 am

Venue: CSE lab-2

Description: This event consists of

three technical rounds.

The preliminary round is Objective type questions(DBMS).Round1 consists of queries and using that students need to bring the output.Round2 is database design with given constraints and relations.



4.Event Name: Coding

Time: 10.00 am to 11.30 am

Venue: CSE lab-3

Description: This event consists of

three technical rounds.

The preliminary round is Objective type(c,c++)..Round1 consists of

Reverse coding.Round2 consists of

problem solving questions.



5.Event Name: Polyvalent-2 Time: 2.00 pm to 4.00 pm

Venue: CSE lab-3

Description: This event consists of

three technical rounds.

The preliminary round is Objective type(All domains in IT)..Round1

consists SDLC(Software

development lifecycle).Round2

consists of problem solving

questions.





# Keep in touch with DIGITIMES for the monthly updates

Send your feedbacks to digitimes 14@gmail.com