



Why Future Emphasis Should be on Algorithms – Not Code

We are all now in what's called the "big data era," and we've been here for quite some time. As human population grew, more information was learned and gathered, making it too difficult to pass on in the form of dialogue. Instead, we needed to codify this information to share it all.

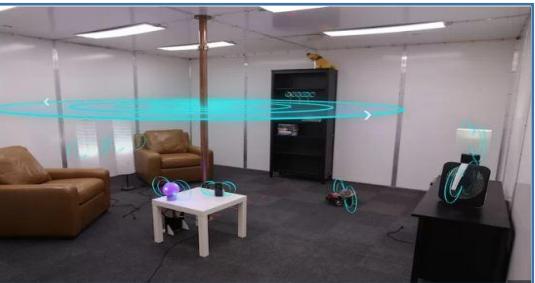
Sharing and codifying this learned knowledge into writing would have been quite a shift, technologically, for our species. Another big change came when we moved to the complex mathematics we have today from what was once just simple calculations. Coding, however, is still relatively new in comparison and didn't come into play until 1945. People figured that if they could find a way to codify instructions to a machine to tell it what steps to take, any manual operation could be eliminated saving any business time and money.

Then came along algorithms. Algorithms are very different from code. The code is a set of instructions for the computer. It's calculation in a specific platform in a specific programming language. Algorithms, on the other hand, are a series of steps that describe a way of solving a problem that meets the criteria of both being correct and ability to be terminated if need be. Because coding is a way of getting instructions direct to a computer it's well suited to implement algorithms.

Algorithms generate better performance gains than any hardware can. In 2010, a Federal report showed how algorithmic improvements have resulted in significant performance increases in areas including logistics, natural language processing, and speech recognition.

Advance Innovation Wireless Charging Room!

Scientists at a branch of The Walt Disney Company called Disney Research have converted an entire room into a wireless charger that can boost the batteries of 10 objects at one time, according to the study. The researchers said they were inspired by inventor Nikola Tesla, who created the first system to wirelessly transmit electricity — the Tesla coil.



Tesla believed there could be a global network of wireless electricity that would use an electromagnetic wave that reverberated between the ionosphere (a layer of the Earth's atmosphere filled with ions and free electrons) and the ground, study co-author Alanson Sample, an associate lab director and principal research scientist at Disney Research, explained in a video. While Tesla's vision didn't come to fruition, Sample and his colleagues were inspired to investigate how wireless charging could be set up in large spaces.

Job Crunch

What Would A Job Interview With Elon Musk Entail?

The billionaire entrepreneur, Elon Musk is constantly on the lookout for new talent and employs a large number of people across several different businesses. But, the one thing he will always look for in a prospective employee is not necessarily all the qualifications they may have or where they went to university, it's the way in which they talk about their own real-world experiences.

Just to give you an insight as to what a job interview would be like with Musk, here is one of his favorite interview questions: "Tell me the story of your life and the decisions you made along the way and why you made them and also tell me about some of the most difficult problems you worked on and how you solved them." What Musk is looking for as a response is one that includes the little details from someone who knows exactly how they solved it?

The form of interview style that Musk tends to favor is not one that looks for exact answers to puzzling conundrums, but rather one that he calls "behavioral interviewing." Asking questions such as 'Give an example of when you solved an analytically difficult problem', will allow the interviewer to see how the candidate reacted in a real-world situation and what they found difficult about it. Musk is also a fan of brain teasers too, so if you are lucky enough to bag yourself a job interview with him, be prepared for a riddle or two. As a heads up, one of his favorites is:

You're standing on the surface of the Earth. You walk one mile south, one mile west, and one mile north. You end up exactly where you started. Where are you?

Answer: The North or South Pole

IT sHE-ROES

By Shruti Kirti Singh (IT 3rd Yr A)



KIRTHIGA REDDY, HEAD, FACEBOOK - INDIA

Kirthiga Reddy heads Facebook India, where the number of users has grown by 150 percent to notch 65 million users. Under her leadership Facebook India has managed to not only grow its user base but also make significant contribution to its global business. Success mantra "Don't be afraid to take risks. In risks will come your biggest opportunities. Be realistic and be prepared for any outcome while giving your best to whatever you do."



KUMUD SRINIVASAN, PRESIDENT, INTEL - INDIA

In January 2013, Kumud Srinivasan was appointed the first woman of the \$54 billion computer chip maker Intel in India. Srinivasan, who joined Intel in 1987, has spent more than 25 years at the company holding several business and information systems positions. Her current focus is to take India to the next level as a Centre for innovation besides R&D and also realize its true worth in terms of its market potential.



ARUNA JAYANTHI, CEO, CAPGEMINI-INDIA

As CEO of Capgemini India, Jayanthi is responsible for the company's consulting, outsourcing and professional service target. Under Jayanthi's leadership, the company's India operations grew phenomenally, with the 30,000 strong head count soon surpassing that of its headquarters in France. Jayanthi is responsible services is responsible Services for Capgemini India that has about 40,000 employees.



VANITHA NARAYANAN, MD, IBM - INDIA

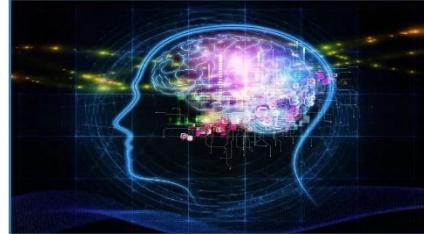
She was appointed as the new Managing Director of global technology solutions company IBM India in January 2013. Narayanan is dedicated to bringing women leaders to the forefront as the executive sponsor for developing women's leadership in IBM's India/South Asia region and a member of IBM's Multicultural Women's Network.

THE RISE OF DEEP LEARNING

AUGMENTED REALITY

By Vartika Malik

BRIDGING THE GAP BETWEEN REAL AND VIRTUAL



Deep learning is becoming increasingly used throughout the world of technology. Big companies use deep learning techniques in various practices throughout their businesses. They generate lots of data, and this is mega important to them as they can learn from this data which will ultimately lead to increased revenue. It's used to predict who will want to buy what and when and uncover trends before they are even known as trends. Microsoft, Amazon, Google, and Facebook all work like this, and all have some form of cloud computing technology to help them to analyze all that data. This is where deep learning comes in. There are five relevant aspects it relates to when talking about computing mainly and they are: data, computing power, research, software, and Deep Learning tools. Most of these components complement each other, and more of any one of them will make the other stronger.

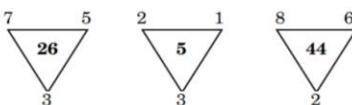
LOGIX

4 fathers, 2 grand-fathers and 4 sons went to watch the movie. What is the minimum number of the tickets they need to buy?

Answer will be published in the next issue

Previous puzzles answer: 1,3,9,27,81,243,729 and 7 weights

What is the missing number in Triangle Four?



Now, many of you might be confusing Augmented Reality with Virtual Reality. While the central idea behind both technologies is same, there is notable difference between AR and VR.

Virtual Reality is used to create a simulated virtual environment. The user is only able to perceive those sensory adaptions which are digitally generated and delivered by their VR interface. The user thus becomes a part of the virtual world and is not able to observe any changes in the real world.

Augmented Reality on the other hand, does not remove the user from the realm of reality. Rather, it enhances the user's view of the real world by adding digital elements to the user's sensory stimuli. AR provides more freedom to the users in the sense that it does not deprive them of the current world.

Recent researches and breakthrough advancements in AR technology has made it a very desirable product. The best feature of AR is that it does not need a heavy and confining headset to implement. It can be implemented on all kinds of digital display devices which allow graphic inputs, like your mobile phones or tablets. The very recent rave game "*Pokemon Go*" brought AR technology to our fingertips as users caught pokemons in their backyards.

The latest and the best application was showcased by Microsoft's HoloLens. Launched in 2016, the HoloLens broke the borders of digital interactivity. It is a self-contained holographic computer that can map and process the physical spaces and things in the surrounding environment within fraction of seconds, creating a semi digital world around the user using interactive holograms. It even contains speakers that provide spatially synthesized sounds to give a more realistic experience.

To read the entire article, follow the link:
<http://blogmantra16.blogspot.com/2017/01/augmented-reality-bridging-gap-between.html>

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DEPARTMENT OF INFORMATION TECHNOLOGY

IT focuses on information systems and information management. Information Technology is particularly important in the "service" industries such as banking, insurance, and communications. The majority of new jobs in recent years have been in these service industries. The purpose of this B.Tech is to provide the skills of applying advanced design, development, implementation and / or maintenance strategies and techniques in the development of Information Technology solutions; and to effectively manage and administer Information Technology. Presently this department is nurturing the talents of approx. 300 students of different semesters and is dedicated to impart quality education to the students in the field of Information Technology and transforming them from students to technocrats and entrepreneurs.

DEPARTMENT VISION AND MISSION

VISION

To develop competent IT professionals catering to the needs of Industry and society in a global perspective.

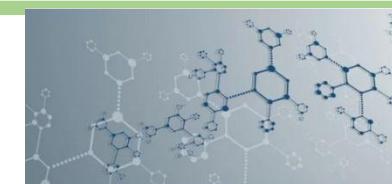
MISSION

To attain academic & professional excellence with collective efforts of all stakeholders through:

- M1: Dissemination of basic concepts and analytical skills.
- M2: Exposure to new tools in the area of Information Technology.
- M3: Effective interaction with industry for better employability.
- M4: Inculcating values and professional ethics with social responsibility.

Computers of the Future May Be Minuscule Molecular Machines

Zeroes and 1s are so last century. The next computer revolution may rely not on a binary number system, but one that can store millions of pieces of information in the minuscule attributes of molecules, such as orientation, size and color.



The Defense Advanced Research Projects Agency (DARPA), the branch of the U.S. Department of Defense charged with dreaming up futuristic new technologies for the military, is developing a new "Molecular Informatics" program to do exactly that. The long-term goal? Harness chemistry's natural variation to crank through massive amounts of data processing and storage, creating minuscule molecular machines.

To get away from this dependence on binary systems (that is, information stored in 0s and 1s), scientists need to invent a whole new information architecture. That means asking and answering basic questions like: How can information be encoded in a molecule? Can molecules perform certain logical operations? And what does it even mean for molecules to compute?

TECHNO-DRISHTEE

AN IT-CHRONICLE

New Year Edition JAN'17-APR'17

IN THIS ISSUE

Techno-Corner

An initiative to be up-to-date with the latest news and information related to new technological updates and devices. More on Page 3.

I-TECH Update

A place to showcase the latest innovations in IT for the students' knowledge and information. This bulletin is updated and maintained by the students themselves. More on Page 3

Woman Power in IT

Featured column on woman power in IT comprising of various top IT women and their achievements . More on Page 2

LOGIX

Logic and reasoning based questions on page 4.

From the Editor's Pen



Welcoming the New Year 2017 and wishing all a very Happy New Year 2017, I take my pen to jot down new words in this year's edition with new enthusiasm.

We, the ITians at GLBAJAJ, have dedicated this issue to the Woman Power-and featured some famous woman in IT world.

Apart from this, futuristic molecular machines, augmented reality, deep learning etc. have been included to give a wider perspective of where IT is leading the world in the Tech Corner.

We are thankful to the students and faculty members of Department of IT, GLBITM for their valuable inputs, and we welcome suggestions and feedback that will help us improve further. We can be reached at tdristee@glbitm.org.