

Information Resources



Compiled by

Mr. H.R. Mohan

Editor, IEEE India Info – The Newsletter of IEEE India Council
ICT Consultant & Former AVP (Systems), The Hindu, Chennai
hrmohan.ieee@gmail.com

From AT&T To Xerox: 73 Corporate Innovation Labs

Innovation is critical for established companies to stay relevant in the face of disruption. Here's our list of corporate innovation labs.

Corporate innovation is critical for established companies looking to stay relevant in the face of disruption from up-and-coming start-ups. With industries being unbundled left and right (supermarkets, banking, cars — just to name a few) more companies are opening up in-house innovation labs every day.

Sometimes corporate innovation goes wrong, and we've written about corporate innovation theater before. Now here's our list of innovation labs, both newly formed and well established, working to turn new ideas into new opportunities at long-lived companies.

Know these innovation labs at <https://goo.gl/E64btP>

Quantum computing 101

Although quantum information has been around for a long time, we're starting to see more about it in the media. We hope to give you a quick start guide on:

- What is quantum computing?
- Superposition and entanglement
- Why do quantum effects matter?
- What can a quantum computer do that a classical computer can't?
- But I don't want to factor very large numbers
- A quantum computer can hack into my private data?
- How can quantum mechanics create ultra-secret keys?
- What else can we do with quantum mechanics?
- Where can I get a quantum computer?
- What is required to build a quantum computer?
- When will there be a real quantum computer?
- Is quantum technology still years away?

Read the full story at <https://goo.gl/2o74Xi>

Huge List of 65 Computer and IT Certifications

Becoming IT certified in a specific skill or product is a way to prove that you have the necessary knowledge to perform a job in a given field or a job that uses specific technologies. Earning certification is a good way for computer science graduates and entry-level IT professionals to improve their resume. Employers often look at a candidate's computer and technology certifications in order to assess whether or not the individual is a viable candidate for a position. From Official Microsoft certifications to cyber security and Linux exams, Webopedia compiled this alphabetical list of different certifications related to computer technologies with a brief explanation of each certification and links to help interested learners find additional information.

Know them at <https://goo.gl/q25YTX>

How India can be a \$10 trillion economy by 2030

“Tech entrepreneurship will drive India’s growth. Today, India is ready to be one of the top five economies in the world. We already are in the top three in PPP (Purchasing Power Parity), but in terms of the current value of GDP we will be top five at 2030,” said Mohandas Pai, Founder, Aarin Capital, at NSE Tech Conclave, which was organised by the National Stock Exchange (NSE), in association with YourStory,

Pai said India today is poised to become a \$10 trillion economy by 2030. Backing his statement, Pai pointed out different ways in which India is positioned in the growth trajectory. The factors that will make India a \$10 trillion economy, he says, are:

Read the post at <https://goo.gl/ATpj26>

Related presentation : India @ 2030 – How Tech Entrepreneurship Will Create A \$10 Trillion Economy at <https://goo.gl/fcTsH>

10 Amazing Leadership Lessons From Design Thinking

Leadership is a challenging proposition in a world of disruptions and changes due to the rate of change being overwhelming. How do leaders cope with constant changes, enormous expectations and an unpredictable future? Well, a lot of the top organisations including Pepsi, Nike, Apple and Google use Design Thinking for leadership matters.

Design thinking is coming up with visual patterns that lead to the desired solutions. In other words, it is about connecting the dots to come up with solutions to practical problems that you want to solve. The Design thinking approach is widely appreciated and adopted by leaders around the globe.

Below, we look at 10 intriguing leadership lessons from design thinking:

Full post at <https://goo.gl/gX3NYD>

Open Source Artificial Intelligence: 50 Top Projects

Since the earliest days of computers, creating machines that could "think" like humans has been a key goal for researchers. In the past few years, computer scientists have made huge leaps forward in artificial intelligence (AI), to the point where the technology is becoming commonplace.

In fact, Gartner predicts, "By 2020, AI technologies will be virtually pervasive in almost every new software product and service." And IDC forecasts that companies will spend \$12.5 billion on AI technology in 2017, 59.3 percent more than in 2016. That tremendous growth is likely to continue through 2020, when revenues could top \$46 billion.

Open source software development has played a huge role in the rise of artificial intelligence, and many of the top machine learning, deep learning, neural network and other AI software is available under open source licenses.

For this list, we selected 50 of the most well-known of these open source artificial intelligence projects. They are organized into categories and then alphabetized within those categories. The lines between some of the categories can be fuzzy, so we used the project owners' descriptions of their applications to determine where to place the various tools.

Know these projects at <https://goo.gl/W79L1N>

24 Underwater Drones – The Boom in Robotics Beneath the Waves

Robotics Beneath the Waves

Aerial drones have buzzed their way into almost every aspect of the modern world, from photography and television news coverage, to environmental monitoring and archaeology.

And many of the concepts developed for aerial drones are being adopted and adapted to work in a very different environment — underwater.

Look at the many ways that drones are being used beneath the waves, by oceanographic scientists, archaeologists, militaries, commercial divers, photographers and undersea explorers.

Slideshow at <https://goo.gl/PiFThN>

Octane: Develop your employability skills

As well as your technical and academic skills, there are other skills that any employer looks for when deciding who they want to work with, be they academic researchers, government, business, non-governmental organisations, public or private sector. While there are many lists of these 'employability' skills, at Oxford we focus on the key eight skills – based on the Confederation of British Industry (CBI)'s report, Future fit: Preparing graduates for the world of work. We call this the Octane framework.

Download the report from <https://goo.gl/vxNNYD>

10 TED talks to sharpen your communication skills

Do you feel like when you talk, no one listens? Or do you struggle to remember what you hear? Improve your speaking and listening skills with these talks

Effective communication is paramount to great leadership. But it's more nuanced and complicated than just learning how to give a great speech. If you want to inspire others through your words, you must learn how to not only speak effectively, but also listen effectively. Communication is a two-way street, after all.

We've rounded up 10 TED Talks that offer wisdom and advice for leaders who are serious about improving their communication skills. From practical tips like leaving bullet points out of slides, to learning the importance of vulnerability in conversations, these talks offer a mini-course on more effective communication. That should lead to deeper understanding on both sides for leaders and teams.

Full post at <https://goo.gl/fFTRGg>

Here are the Top Online Scams You Need to Avoid Today

We truly want to believe that the Internet is a safe place where you can't fall for all types of online scams, but it's always good reminder to do a "reality check". We, humans, can become an easy target for malicious actors who want to steal our most valuable personal data.

Criminal minds can reach these days further than before, into our private lives, our homes and work offices. And there is little we can do about it. Attack tactics and tools vary from traditional attack vectors, which use malicious software and vulnerabilities present in almost all the programs and apps (even in the popular Windows operating systems), to ingenious phishing scams deployed from unexpected regions of the world, where justice can't easily reach out to catch the eventual perpetrators.

Use the links in the post to quickly navigate the list of online scams and see the top online scams you need to stay away from right now.

Full post at <https://goo.gl/2L6EVn>

33 Industries Other Than Auto That Driverless Cars Could Turn Upside Down

Fast food, real estate, military operations, even home improvement — many large industries will have to shift their strategies in the wake of driverless cars.

It's all but a certainty that autonomous or driverless vehicles will be widely used in the United States at some point over the next two decades.

Already, over two dozen major corporates including Google, Apple, and Mercedes Benz are hard at work building their own self-driving vehicles. Tesla's Model S includes an autopilot mode which gives it semi-autonomous capabilities.

Clearly, tech and auto companies stand to gain, but many other industries could face serious upheavals unless they are able to adapt to the many changes self-driving cars will bring to the market.

Below, we dive into 33 industries, from the obvious (professional driving & trucking) to the more surprising (fitness?), that will be shaken up by the advent of autonomous vehicles.

Full story at <https://goo.gl/LB4Bzh>

More resources from the "Interesting Reads" blog post archives at <https://goo.gl/VGXizd>