

THE SOCIETY

The Magazine of the Singapore Computer Society

GEEKS GADGETS GIGABYTES



02 Infocomm Media 2025:
What's in it for You and I?



17 SCS Splash Awards 2015



Issue
03
2015

Vision

To be the leading infocomm and digital media professional society in Singapore

Mission

Lead the Way

To lead and contribute to the vibrancy and growth of Singapore's infocomm and digital media industry

Add Value

To add value to the infocomm and digital media professional's career and personal development

Be the Voice

To engage and be the voice of the infocomm and digital media community

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The Future is Now: Geeks, Gadgets & Gigabytes

If you haven't already noticed the new look *The IT Society* is spotting, you will surely see the difference when you navigate further. Change is a constant in the new world. It is also the only way to encourage sustained engagement. That is why we have refreshed *The IT Society* to enhance your reading experience.

The new world has arrived. As the vanguard of the future, we are set to change the world (or at least Singapore) by 2025 – according to the Infocomm Media Masterplan 2025.

And this goes beyond our professional identities. When we leave our office (physically and mentally), many of us are GEEKS unmasked – curious and interested in the latest GADGETS and GIGABYTES (and gigabits too!). For one, we are curious if 3D Virtual Reality will take off or what it is like working in an office surrounded by our own kind – geeks? Well, satisfy your curiosity.

As geeks, we are unique – from the way we perceive the world to the way we see

our own future. The latest infocomm survey results say it all. We also relate better to fellow geeks like Howie Lau, our new SCS President, and Victor Neo, Lead Engineer of Carousell. Find out about their personal experiences and aspirations.

And if you are inspired, you should start to plan your own development too! Polish your project management skills and make networking work for you. This issue is dedicated to us – geeks.

Enjoy the revamped *The IT Society*. Talk to us, share your feedback... who knows, this issue's popular sections may very well become staples in 2016.

Enjoy!

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Infocomm Media 2025:

What's in it for You and I?

Two years in the making, the recently unveiled Infocomm Media 2025 report on August 11 points the way to realising Singapore's goal as the world's first Smart Nation. Not surprisingly, you and I are integral to the achievement of this master plan.

More than a holistic blueprint for Singapore's infocomm media sectors for the decade ahead, Infocomm Media 2025 offers a compass to navigate the ever-changing environment and leverage potential of upcoming technology and business trends.

In a world where technologies evolve, business models change and disruptions by the unexpected constantly take place, the Plan sets out to not only create a globally competitive infocomm media ecosystem that enables and complements Singapore's Smart Nation vision, but also provide a "living" reference on broad directions and strategic focus areas. These include the need to:

- capitalise on data, advanced communications and computational technologies to create a quantum leap in Singapore's competitiveness,
- nurture an ecosystem that encourages risk-taking to create Singapore-made content, products and services, and
- connect Singapore's people through infocomm media to enhance quality of life and foster a stronger Singapore identity.

DATA WILL CONNECT BUSINESSES TO PEOPLE

Data and analytics will play a big part in many areas, underpinning Singapore's efforts in becoming a Smart Nation. For example, intelligence on traffic patterns paves the way for more efficient urban logistics and smoother city commutes; data insights gained from location-based services and mobile apps enable retailers to better connect with customers, increasing the probability of sale closure.

Similarly, media services companies can turn to audience measurement tools, which take into account minute details of customer behaviour, to predict customers' consumption habits and offer relevant products and/or services at opportune moments. Case in point: a game service analyses players' on-screen actions to predict when they would most likely purchase an in-game item or watch an in-game advertisement.

INFRASTRUCTURE WILL BE MORE ROBUST

Usually, talk of data and analytics involves sensors. Whether they are virtual sensors that measure online actions or physical ones that detect air quality, they require robust infrastructure to deliver raw data. To which end, Singapore is currently bolstering the island-wide fibre optic network with HetNet –

heterogeneous network technology – to ensure pervasive and strong connectivity, as well as more efficient use of limited radio frequency spectrum so that more end users can be hooked up on the go.

PEOPLE WILL ACQUIRE NEW SKILLS AND THINKING

Technology is only as useful as the talent using it. Singapore's most important resource – people – is critical to realising the country's ambitious plans for infocomm media 2025. Presently, schemes are already in place to develop the next wave of skilled and entrepreneurial talents.

For instance, IDA has been organising events such as Code@SG to encourage young students to experiment, solve problems and develop innovative solutions through technology since 2014. To date, 46,000 students have benefitted from the movement and IDA has plans to reach out to a total of 72,000 students by April 2016.

CONTENT WILL BE DYNAMIC AND COLLABORATIVE

On the media front, new digital and technology trends are also influencing the landscape. Content is increasingly digitised and delivered across multiple technological devices; content creators can also interact with fans by getting their participation to shape the final content. This means content creators have to tell original and compelling stories across multiple media platforms, as well as cultivate a wide fan base.

In line with these developments, the Media Development Authority (MDA) has introduced new initiatives to enable the media sector to leverage these trends. While MDA's Story Lab initiative brings together diverse talents to incubate story ideas and



innovative ways of telling stories across multimedia platforms, their Creators' Space offers an environment for content creators to collaborate and create online video content. Significantly, a community of creators is nurtured as a result.

There are also plans to help media talent and SMEs build their ability in running effective rewards-based crowdfunding

campaigns so that they can raise funds and better understand what consumers would support in such alternative funding campaigns – strengthening the bond between content producers and their fans.

SINGAPOREANS' COMMITMENT WILL BE KEY

Ultimately, Singaporeans have to come together to foster a vibrant infocomm

media landscape. Daring to try new ways of doing things will be the order of the day; constant and consistent refinements will be needed – even if sometimes those may not proceed as planned. This “can-do” and “get-going” attitude, which Singaporeans have been known for, will continue to be pivotal to the advance of the infocomm media space for the next decade and beyond.

WHAT WE WANT

Sustainable and Quality Growth

Better Quality of Life

WHAT WE NEED

A Globally Competitive Infocomm Media Ecosystem that



Enables and Complements Singapore's Smart Nation Vision



Effects Economic and Social Transformation



Creates Enriching and Compelling Content

HOW WE WILL GO ABOUT DOING IT

1



Capitalise on data, advanced communications and computational technologies to bring about a quantum leap in our economic competitiveness

2



Nurture an infocomm media ecosystem that encourages risk-taking and continuous experimentation to create Singapore-made content, products and services

3



Connect people through infocomm media to enhance quality of life in Singapore and to foster a stronger Singapore identity

The IT Society would like to thank the Ministry of Communications and Information for contributing this article.

SCS EVENTS 2016

JAN
27

SCM SIG: Seminar on Robotics & Automation

MAR
04

SCS Gala Dinner & IT Leader Awards 2016

MAR
28

QA Chapter: 2-Day Workshop on Secure Software Development Model (SSDM)

FEB
26

BCG: BCM Conference 2016

MAR
24

SCS 49th AGM

APR
04

QA Chapter: 2-Day Workshop on Secure Software Development for Banking and Finance (SDBF)



Will **3D** Virtual Reality be the Next Big Thing?



TEE JIA HEN

Member, SCS
Chief Executive Officer,
VRcollab

Development of 3D virtual reality (VR) has been going on for decades, but will Facebook's acquisition of Oculus Rift for US\$2 billion finally tip it towards mass appeal? What else is needed to prevent it from going the way of 3D television sets?

FROM 2D DRAWING TO 3D SCULPTING

Mark Zuckerberg was recently shown playing virtual ping-pong and slingshots with another person in a separate room with Oculus Toybox. This was made possible by the Oculus head-mounted display (HMD) and the infrared camera that detects the position of users' hands in 3D. Oculus further demonstrated its technology with the Medium, a tool similar to Microsoft Paint for virtual reality. Traditionally, drawing three-dimensional objects with tools like 3ds Max and Maya is often hampered by two-dimensional devices such as a mouse, the Medium allows users to move their hands in three dimensions and sculpt in 3D.

FROM MEDIUM CREATION TO CONTENT CREATIVITY

However, no medium can exist without content. Indeed, according to Desmond Ng, Director, Business Development of EON Reality, "The major problem with the VR industry is in 3D content creation, which involves customisation and curating, according to specific industry and user requirements. This in itself is a long and time consuming process."

Hopefully, the ability to create 3D content with three-dimensional tools like Oculus Touch or HTC Vive will propel development in the creation of three-dimensional digital content. Minecraft opened a crack in the Pandora's Box of crowdsourced 3D creativity; Oculus Touch or HTC Vive might just expose it fully. But before 3D sculpturing proliferates, a boom of 360-degree videos uploaded to Facebook 360 Video and YouTube 360° Video can be expected, driving demand for VR content.

FROM 2D TO VR WEBSITES

To bring VR beyond Facebook and YouTube – on to the World Wide Web, a few components are needed: Fullscreen API that enables HTML5 YouTube videos to play fullscreen and WebGL (what Facebook

uses for its 360 Video) that makes web 3D possible. Currently, both of these are supported by major browsers.

The missing ingredient is WebVR, the API that allows browser to understand VR input and the device orientation of HMDs. As it appears, pre-release versions of Chrome (Chromium) and Firefox (Firefox Nightly) both support this API and are set to herald the coming of the VR website evolution.

With these main ingredients falling in place, it becomes possible for specialised developers to use Javascript 3D engines like Three.js, GLJS or WebGL to develop a beautiful VR experience with beautiful 3D scenes. However, even for seasoned web developers, the need to understand vertex shader, fragment shader, uniform, material, geometry, raycasting, vertexes and others can be overwhelming.

What exactly can a 3D VR website do? For one, browsing Amazon or eBay can

now be an immersive experience; imagine being transported to a giant exhibition hall with a click where you can try products before having them printed in 3D and delivered to you, all before you remove your HMD.

HTML/CSS FOR VIRTUAL REALITY WEBSITES

It is likely that most VR websites will be like an exhibition hall and VR input devices such as the Oculus Touch will allow the user to rearrange the VR room with their VR hands. The problem is: HTML works great with 2D poster-like content but for a room-like content, a markup language that allows the computer to make calculations is necessary.

If we were to level up HTML to 3D, what would it look like? Will the `<table>` tag be an actual table? We created an open source markup language, VRcollab WebVR Markup, to see how 3D websites can work. See the examples below.

In conclusion, the future of 3D is filled with unknown surprises. More than just videos and games, websites will become the next frontier for 3D VR capabilities and possibly open up a treasure trove, offering new ways of interacting with the Web.

1. Dynamic Scaling

When a new `<meta-item>` is placed on the `<meta-tsurface>`, it will auto-scale just like how a HTML table tag does.



3. Display Inline

VRcollab WebVR Markup is also able to auto arrange the 3D objects inserted.



2. Style-able 3D

Using the same table as an example, what arguments have to be changed to make the table fit into a different style? The possibilities are shown below.



To find out more about VRcollab WebVR Markup or star the project, please visit

github.com/vr-collab/webvr-markup



Geeks Creed: The Videogame Culture at Work

In less than 20 years, the videogame market has gone from a backyard garage pastime to a multibillion dollars industry. This revolution was launched by geeks with all their nerdy passion: has it lost its soul during this spectacular transformation? Not at Ubisoft which counts 10,000 employees in studios around the globe.



OLIVIER DE ROTALIER
Senior Member, SCS
MD, Ubisoft Singapore

Ubisoft Singapore was recognised this year by SCS as the “Best Tech Company To Work For”. This is great recognition for the staff’s hard work considering that the studio was built from scratch seven years ago in a country where the videogame industry was nearly non-existent. But being the “Best Tech Company To Work For” doesn’t mean that it is the best workplace for – just anybody. Ubisoft’s geeky culture may not suit everyone.

GEEKS: UBISOFT IS THE PLACE FOR YOU!

So what is Ubisoft’s culture? Perhaps, we should start with a simple definition: what is a geek? According to Wikipedia, a geek is a “non-mainstream” person, an “expert or enthusiast or a person obsessed with a hobby or intellectual pursuit”. Ubisoft’s people pretty much correspond to the definition: passionate people, experts in their field who think differently and want to innovate. As a company, we need to provide them with the type of environment they will thrive in.

TAKE RISKS! DON’T BE AFRAID TO FAIL!

At Ubisoft, there is room to take risks and to fail – because we believe that we learn by trying and through making mistakes. Our culture is fundamentally bottom-up. We encourage people to be creative, come up with ideas and own them. Whether it is a new design, an art exhibition, or a new set of HR tools. When we innovate, we don’t have pre-determined processes: our people invent these processes. Some people may feel uncomfortable with this notion. That’s why our culture is not for everyone.

WE ARE EARLY TECH-ADOPTERS

In our studio, we push our staff to test new technologies. We are a gaming

company; gaming is software, and software is tech. We eat, breathe and live tech. Ubisoft is always ready to embrace new technology and new platforms: think about the Wii, the Kinect, or more recently the new generation of consoles. Ubisoft jumps on the technology bandwagon because we want to be one of the pioneers to provide groundbreaking experiences to players. At E3 this year, Ubisoft announced our support for Virtual Reality (VR), and demonstrated some early prototypes with Oculus as well as Trackmania Turbo for the Playstation 4 Morpheus VR hardware.

AN ENGAGING CULTURE STEMS FROM SHARED VALUES

To us, good cultural fit means positive vibes for the company and the employees. Studies show that employees who fit well with their organisation have greater job satisfaction and identify more with their company. At Ubisoft, we have first-hand experience: people are less likely to quit, more committed and show superior job performance (Kristof-Brown, 2005). Technical skills may be important, but shared core values are equally critical, especially for generations Y and X which represent the majority of Ubisoft employees.

DIVERSITY DEFINES UBISOFT

So yes, we are geeks, and we like to be surrounded by geeks. But that doesn’t mean we are all the same, or that we recruit only one type of talent! Our workforce is rich and diverse: we have more than 30 different nationalities coming from five continents. We have men and women, over 50 and under 23. We have ex-entrepreneurs, journalists, Doctors in Chemistry and architects. And I strongly believe that this diversity is at the root of our creativity!

Rice, Sharks and other Tips for *Surviving the Technology Sector*

HOWIE LAU

President, SCS

Age: 46

Experience: 22 years

Current: Chief Marketing Officer, StarHub;
President of SCS

Previous: Vice President,
Corporate Development, Lenovo

Earliest Tech Experience:

Computer Club in secondary school

Current Favourite Game: FIFA16



The IT Society catches up with Howie Lau, President of SCS and a 22-year veteran of the tech industry, as he shares his views on how ICT has changed and what he envisions for Singapore's tech scene.

Q: Question, **H:** Mr Howie Lau

Q: As a major player in the industry, can you list the main changes the technology landscape has experienced over the last two decades?

H: The role of IT has changed from a productivity tool to a competitive advantage. Technology decisions are more embedded and critical, so it is not just the CIO and CTO, but the CEO and even the CMO are now involved.

Another change is that the level of tech savviness in Singapore has grown by leaps and bounds because of education, exposure and the

lowering cost of technology. Access to technology now is just everywhere.

Q: You went through the dotcom bubble in the early 2000s. Why do you think it burst and what was the impact to the tech industry?

H: There was a company I met in 1999 or 2000 where the idea was to upload videos for sharing and collect advertising revenue. But guess what? Back then there was no proliferation of phones with video capabilities and the readiness of the market in terms of customer adoption and infrastructure

was not there. So the bubble burst, and people became nervous about tech investments, but entrepreneurs learnt valuable lessons. The greater awareness on the potential of technology also seeded the current wave of start-ups.

Q: Name the most important insight you've gained in the course of your career.

H: Staying curious. There is a Chinese saying: keep an eye on the bowl of rice you're eating, another eye on the kitchen, and a third on the rice growing in the field. This is pertinent in ICT because you need to be constantly curious about what's evolving.



"Keep learning. Keep swimming like a shark; if you don't, you will sink to the bottom."

Q: The progress the ICT sector has made thus far is...

H: Exciting. The 4th annual Infocomm Survey shows there were less people moving out of the industry and we understand that the cut-off points for ICT students have been increasingly higher over the past few years.

The other very encouraging part is that we have tech unicorns here in Singapore and more importantly, a very lively start-up ecosystem such as Blocks 71 and 79 at one-north.

Q: What do you think are going for and against the tech industry in Singapore?

H: We need to overcome our small domestic market, and funding beyond the first round is still challenging.

But I think technology is a great leveller for a small country like us. There is every reason to be optimistic

that the next Uber or Airbnb will come from Singapore because we have a highly literate population, we have a robust environment and we have solid government support for the tech sector.

Q: What type of opportunities can ICT professionals look forward to in the next decade?

H: I think in the short to medium term, there will be a shortage of data analytics and cyber security skills in Singapore. If tech continues to be a critical competitive advantage, the digitally savvy will always be in demand.

Q: Fast forward to the future. What do you foresee are the three biggest changes the ICT industry will undergo in the next 10 years? 20 years?

H: Tech disappears because everything becomes tech. It is in every fabric

of life, be it personalised news or messages being collated and imbued with recommended responses based on previous patterns. Neuromorphism and AI will become much more embedded in what we do.

Q: What is your vision for SCS?

H: At SCS, one of the things we try to do is to make sure we have created the platforms for members to stay updated. Our seminars, special interest groups or chapters as well as our series of certifications and courses can help members who want to stay curious stay relevant.

We want to contribute to and be a catalyst for the growth of the industry, to recognise industry leaders, to help members connect, and to inspire the next generation. This is a collective effort, and it requires everybody to work together.

8 things about Our New SCS President

How long have you been in the IT industry?

Since 1993

Is there anyone you consider a role model?

Right now I'm intrigued by Elon Musk

Tell us 3 things you love about Singapore.

① Food
② Singlish
③ Safety

What did you want to be when you were 18?

chef!

What are 3 things you want to say to those who want to join the IT industry?

① It's gonna be a great ride!
② Keep learning network.
③ Build your

What's your favourite food?

Fried cannot cake from AMK Ave 5 Hawker Centre

What's one thing you would want to change this world?

More optimism 😊

The most important thing in life is ...

Family and friends.

Beyond Survival: A Bigger and Better Local Technology Scene

"In start-ups, what people see from the outside is all the nice stuff, but the work is real, and it's hard."

VICTOR NEO

Age: 27

Experience: 2 years

Current: Lead Engineer, Carousell

Earliest Tech Experience:

Creating websites for secondary school assignments

Current Favourite Gadget:

Pebble Time watch



A fresh face in the local tech arena, Carousell's Lead Engineer Victor Neo sits down with *The IT Society* for a quick chat on challenges the industry faces today and how the tech landscape will transform en route to the future.

Q: What inspired you to join the field of IT?

V: What really hooked me was the ability to see my creations come to life in the browser. It's art in a different form.

Q: What was the mood after the dotcom crash? When do you think the mood started to change?

V: Singapore's ICT industry took quite a hit. Whoever was working in that industry would tell people to stay away, including my uncle.

Then Facebook grew into a tech giant around 2008 and people became

curious about Google. That was when the mood changed. Now it's hip and cool to learn programming, and computing is one of the hottest courses in NUS this year.

Q: What prompted you to join a start-up instead of an MNC?

V: During my polytechnic days, I interned at KPMG for over a semester as a developer. The knowledge was compartmentalised and I couldn't see the big picture or learn about the entire department.

At a start-up, however, you are able to see the company grow and evolve, see how people are communicating and you get a bigger, clearer picture. That attracted me.



Q: What do you feel makes up the DNA of a good ICT professional?

V: It is being passionate about what you're working on and what you want to learn next. Many would say things like "I can't do this because it wasn't taught" and I think that's the wrong attitude to have. That is like saying I can't drive a Mazda because the school only taught me how to drive a Honda.

Q: What do you think are the biggest challenges the ICT sector faces as a whole?

V: The issue is how to better gain business insights out of the petabytes and exabytes of data collected. We may have the tools to analyse them, but we don't know how to apply them in the right way.

Also, as an industry, we are too buzzword friendly. If people are talking about it, everyone will do it even when it's not relevant. I hear people talking about big data when

the kind of size they're dealing with is just called data. That's a blindspot we have to check.

Q: In the area of tech, how do you think Singapore compares to our peers in Europe and US? What more can we do?

V: We are still very young, but salary-wise, for the start-up industry in particular, we are matching up very well against our US counterparts.

We don't have tech leaders from Singapore yet, but I see a lot of start-ups here taking the initiative to grow so we're closer to having our own Facebook and Google. And Carousell would like to be one of them.

Q: The year is 2025. You step in for a day and you see...

V: Tech companies and open source have become the norm, and there is a lot of innovation coming from Singapore. Our government would be a stronger proponent of the open web and let their projects be open

source so people can audit them, and use these as teaching platforms.

Q: What do you foresee would happen 20 years from now in terms of tech?

V: There will be a heavier emphasis on how technology can enhance people's lives. Ideas like quantum computing that are still science fiction now will come to life. The government will take the lead, but private enterprise will bring it forward.

Q: What keeps you going at work and in life?

V: Seeing innovation happen and seeing my brother grow up. For the former, it's exciting when you see Facebook and Google competing over data centre designs, and all these will ultimately drive even more innovation. For the latter, my brother is 12 years younger, in Secondary Three, and he is into tech. I would want to do better now for him, make sure the tech ecosystem is at its best when he comes in.

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on emerging trends & breakthroughs



Training Calendar
to boost your professional standing



Latest Job Openings
for your next career move



Online Video Library
to supplement your learning



IT Governance: Are You There Yet?

Increasing data use is driving economic growth in today's smart cities, making IT Governance a vital component of effective leadership and risk management.

The excitement with Cloud, Mobile Apps, Internet of Things, Big Data, Agile and other new technologies in recent times has taken away the focus from IT Governance, which was the buzzword not too long ago.

After the Enron and WorldCom scandals, the US Congress passed an act calling for greater transparency and accountability in corporate financial accounting – the infamous Sarbanes-Oxley Act of 2002 or SOX. The impetus to comply with the new regulation drove businesses to tighten corporate governance and financial controls.

Coinciding with the takeoff of the Internet and eCommerce, IT Governance was born in part, to support SOX compliance and to ensure that IT implementations have adequate, documented controls for their integration, application, support and subsequent updates. A Gartner survey of top CIO concerns at that time ranked

“providing guidance for the board/executive” as top priority and “improving IT Governance” as third¹.

Nicholas Tan, a veteran in enterprise technology from NUS-ISS' IT Strategy & Management Practice, believes that new opportunities in the areas of Data Analytics, Cybersecurity and Mobile Apps are once again putting IT Governance in the spotlight. “And it will become more than just a buzzword,” he adds.

According to the IT Governance Institute's definition, IT Governance is the responsibility of the Board of Directors and executive management. It consists of leadership, organisational structures and processes to ensure that the enterprise IT sustains and extends the organisation's strategy and objectives.

“Most companies would adopt COBIT (Control Objectives for Information and Related Technology), but ISO/IEC

38500:2015 – another international standard, is also gaining foothold,” says Nicholas.

While COBIT – a globally recognised IT Governance framework that was developed by ISACA (Information Systems Audit and Control Association) in 1996 – provides an exhaustive set of processes, from planning and implementation to delivery and monitoring, to enable IT Governance from the ground up, ISO 38500 sets out the general principles for IT Governance and takes a top-down approach. Both principles and process framework are required for an organisation to align its IT structure and investments with the business objectives and outcomes.

¹ <http://www.isaca.org/Journal/archives/2004/Volume-1/Pages/IT-Governance-and-Its-Mechanisms.aspx>

For organisations considering IT Governance or deliberating on the right approach, Nicholas provides a simple cheat sheet to get the ball rolling.

Rationalisation. Make IT Governance a management priority. Develop a relevant case to illustrate the value of IT Governance, such as cost avoidance, productivity gain or risk management, to your organisation and its operations – appealing to the management's priorities and corporate objectives.

Readiness. Make IT Governance part of the IT strategy. Perform a gap analysis of the maturity of IT Governance by assessing the 'as is' state and identifying the 'to be' position. Prioritise objectives and outcomes, and develop a set of plans, policies and processes to close the gap.

Relevance. Make a choice of relevant COBIT processes to be 'used' to achieve established targets as opposed to 'implementing' every process for compliance.

Recognition. Make an effort to acknowledge the IT Governance team. Support them by providing attention, resources and empowerment required to execute IT Governance effectively.

Result. Make conformance to IT Governance an indicator to monitor compliance to policies and performance against plans.

“The importance and value of IT Governance cannot be overemphasised,” says Nicholas. Simply: if you want to enhance your business results and have less digital headaches downstream, make sure you've put IT Governance in place.

Learn about IT Governance from Nicholas at (65) 6516 2011 or nicholas_tan@nus.edu.sg. Nicholas has designed and implemented enterprise technology solutions and services for 15 years in both the hospitality and logistics industries.

NUS-ISS conducts regular training on the NICE – Enterprise IT Governance and NICE- COBIT5 Foundation as part of the skills development roadmap for IT Governance and Risk Management.

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Other Programmes by SST

- Aerospace Systems
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Master Certificate Programme on CIO Practices

Being a thought leader in defining IT management education, STMI is offering a unique programme for senior technology leaders. The Master Certificate Programme on CIO Practices is formalized to provide insights and best practices that help prepare and groom individuals aspiring to take up technology leadership roles in the organization.

This all-rounded course comprises two sections, namely, IT Leadership Programme (ILP) and Multi-disciplinary Modules (MDM). The ILP will be conducted twice a year as a one-week workshop while the MDM will see participants completing five out of the nine offered modules, all within a stipulated period of eighteen months. The course covers a mix of topics dealing with issues relating to technology, strategic management, business & human capital management and legal & regulatory management.

Take your first step towards IT management with STMI.

IT Leadership Programme (ILP)

CEO and CFO Perspective of IT	Invited Speaker: Mr. Paul Chong <i>President and Chief Executive Officer, Certis CISCO Security Pte Ltd</i>	Date 7, 8, 9, 10 & 11 March 2016
NICF - Leadership and Talent Management for IT Managers	Speaker: Mr. Ong Whee Teck <i>Course Leader of STMI; Managing Director, Accenture</i>	
NICF - Value and Innovation of IT	Speaker: Mr. Sushil Chatterji <i>Course Leader of STMI; Author of official 2010 CGEIT Review Manual; Subject Matter Expert in development of ISO/IEC 38500</i>	Subsidized Cost: \$1926.00* <small>*Nett fee. For eligible Singaporeans and PRs. Terms and conditions apply.</small>



Putting the 'Pro' in Project Management

Everyone of us must have either been involved or run a project before in our professional career. However, do we always know how our roles – whether as a project manager or member – contribute to the company's progress strategically?



MAJID BHATTI
(CITPM, COMIT, ITIL, PMP, SMAC, CSSC)

Member, SCS
Asst. Vice President,
Singapore Post Ltd

Surprisingly, the answer to that question is not always "yes". Keeping projects strategically aligned is a challenge for many organisations. The biggest challenge being the development of a common value creation framework that allows project managers to clearly articulate business strategy and show alignment of project portfolio with these strategies.

Projects take all forms and shapes, and while they may not drive profitability, it is important that an analytical project map recognises the value they present. The most adept project managers are keen observers of the organisational landscape they inhabit – asking questions about the project's purpose that transcend revenue generation.

MAKINGS OF A PROFESSIONAL PROJECT MANAGER

Project managers' ability to communicate project benefits can mean the difference between landing on the map – and 'falling off' it. Translating corporate strategy to tell a relevant and compelling story about the project is therefore an important skill a project manager must have.

Yet many project managers are not proficient in assessing alignment. At times, this results because projects are poorly defined at the executive level and/or there was a lack of consensus among key project players. Other times, traditional organisation structure does not facilitate project implementation, or that the project has gotten mixed up with operational and functional work.

The project manager therefore has to have a good grasp of the organisation's view

of success to make sure that project outcomes are well aligned to the holistic game plan. As a savvy project manager, it is pivotal to realise business objectives, stakeholders and sponsors may change with the dynamic environment. Thus, there is a need to periodically assess the project's value to the organisation over its lifespan.

PROJECT MANAGEMENT SKILLS ARE IN DEMAND!

As projects continue to proliferate and be more multi-faceted, it is inevitable that project management skills will become fundamental and necessary for career success. Project managers will also be increasingly recognised for the value they bring to the corporate bottom line, playing an instrumental role to business growth.

A PROJECT MANAGER IS ONLY A PROJECT MANAGER, UNTIL CITPM.

Get the widely recognised and de facto professional standard for IT project management competency by applying for Certification in IT Project Management (CITPM) today. The next certification enrolment is in May 2016.

CITPM is covered under CITREP II, which funds up to 50% of the certification fee capped at \$500 for company-sponsored or self-sponsored individuals (for Singapore Citizens) on successful application for certification. For more details on CITREP II, refer to www.ida.gov.sg/citrep for more information.

Your three-step guide to maintaining strategic alignment of projects:

STEP 01

Start the alignment process at the project initiation phase. Use regular detailed check-ins regardless of where a project sits in the organisation's list of priorities.

Rationale: It is essential to understand how your project directly or indirectly affects the organisation's long-term plans.

STEP 02

Request explicit and ongoing support from sponsors. Many organisations believe that a "steering committee" is much more effective than a single sponsor.

Rationale: Securing broad sponsorship and commitment at the executive level allow project managers to fully scope the programme or its associated projects. It also enables managers to implement regular checkpoints and practise necessary change management to align projects with overarching business objectives.

STEP 03

Stay attuned to changes in the work environment.

Rationale: Every year – especially at the start of each organisation's financial year – plans are adjusted in response to the company's strategic objectives.



Upskilling Financial Services IT Practitioners

"The future belongs to those who prepare for it today"
- Malcom X

Professionals who are able to effectively integrate business and IT initiatives are poised to stay ahead of the curve.



Information technology lies at the heart of the financial services industry's transformation. The pace of technological advancement and innovation has quickened and there shows no signs of slowing down. And with Singapore's vision to be the leading financial hub of Asia, the industry is demanding a more rapid and continuous infusion and sharpening of skills amongst the people. Are you well equipped to keep up with the changes in the financial sector and seize opportunities coming your way?

The financial services industry is increasingly looking for professionals who are proficient in both business and technical skills. While financial IT excellence is key, today, it is no longer an edge for an IT professional to possess just the technical know-how but one who is also armed with a holistic understanding of the business needs and processes of financial institutions and the underlying financial products and market developments.

LEARNING HOW TO LEARN

In today's environment, a fresh hire and new-entrant to the financial industry must understand that academic qualifications alone will not make him or her work-

ready and employable. Cross-functional adaptability, cross-geographical exposures, leadership and soft-skills – these are all qualities that financial professionals today must arm themselves with. Continuous education and lifelong learning must therefore be part of every professional's career development roadmap.

In the technology and operations space of the financial services sector where IT professionals in particular reside, the underlying assumption is that these professionals possess the required competencies and skills to perform their key function. But beyond that is there any gap that can be bridged in order to boost their efficiency and bring more value to their work? As alluded to earlier, professionals who are able to effectively integrate business and IT initiatives are expected to be in greater demand than others. It is therefore pertinent to top off their technical know-how with essential cross-functional knowledge of related operations of the financial institutions. With a strong foundational knowledge of banking technology and operations coupled with the enterprise-wide skills, they will be better equipped when

dealing with the relevant stakeholders and bring about greater efficiency.

OPPORTUNITIES TO UPSKILL AROUND

Given the government emphasis on lifelong learning and innovation under the SkillsFuture movement that will be rolled out in 2016, there has never been a better time for adult learners to leverage on this and be skilled, reskilled and upskilled through life. Working professionals can look forward to a plethora of short, skills-focused modular courses and other initiatives relevant to industry needs that provide greater opportunities in deepening their skills.

While the government is committed to continually enhance the training landscape and make training and development more accessible, the financial institutions based here must also espouse and engage in proactive people development. The employees and individuals themselves must also take charge of their professional development. With these three hands clapping together, we will be better able to build up and sustain the human capital of the financial sector.

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SINGAPORE MANAGEMENT UNIVERSITY

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SkillsFuture is a national movement to provide Singaporeans with the opportunities to develop their fullest potential throughout life. No matter where you are in life, you will find a variety of resources to help you attain mastery of skills to own a better future.



IN SCHOOL

BETTER CHOICES

Allows you to make well-informed choices in your education and career

- ✎ Structured study and career guidance
- ✎ Better support for career exploration and workplace learning
- ✎ Smoother transition from school to work



STARTING WORK

GREATER OPPORTUNITIES

Gives you a head start in your career and skills development

- 👜 Head start in a career of your choice
- 👜 Continual skills development through workplace learning and mentorship
- 👜 Greater support for your skills upgrading



GROWING CAREER

DEEPER SKILLS

Enables you to stay adaptable and employable through continual learning

- 💡 Higher funding support for your skills upgrading
- 💡 Enhances your employability
- 💡 Deepen your skills and broaden your horizon

PROGRAMMES YOU CAN BENEFIT FROM

IN SCHOOL

- Education and Career Guidance
- Enhanced Internships
- Individual Learning Portfolio
- Young Talent Programme

STARTING WORK

- Education and Career Guidance
- Individual Learning Portfolio
- P-Max
- SkillsFuture Credit
- SkillsFuture Earn and Learn Programme
- SkillsFuture Study Awards

GROWING CAREER

- Education and Career Guidance
- Individual Learning Portfolio
- P-Max
- SkillsFuture Credit
- SkillsFuture Fellowships
- SkillsFuture Leadership Development Initiative
- SkillsFuture Mid-Career Enhanced Subsidy
- Skills-Based Modular Courses



SCS Welcomes Two New Student Chapters

SCS added two new Student Chapters recently – Singapore Institute of Technology (SIT) on 9 September and Singapore University of Technology and Design (SUTD) on 16 September.

With the establishment of these Chapters, both SIT and SUTD students can now enjoy direct access to SCS activities and programmes, as well as network with more than 31,000 student members and professionals in the infocomm and digital media community!

Correspondingly, the launch of these new student chapters has also bolstered SCS' commitment to developing young talent in local institutes of higher education.



▲ Howie Lau (SCS President), left, and Prof Ting Seng Kiong (then SIT Deputy President (Academic) and Provost), right, signing the Memorandum Of Understanding at the launch of the SIT Student Chapter.

▲ Prof Aditya Mathur (Head of Pillar of ISTD, SUTD), left, and Dr Chong Yoke Sin (Vice President, SCS), right, exchanging plaques at the launch of the SUTD Student Chapter.

SCS Launches Cloud Computing Chapter @

CLOUDASIA 2015

Established some five years ago in 2010, the SCS Special Interest Group (SIG) in cloud computing has taken an active interest in issues concerning enterprise cloud computing and virtualisation.

Against the backdrop of a growing cloud landscape in Singapore and the need to further promote cloud adoption, the Cloud SIG has been elevated to become the Cloud Computing Chapter on 28 October at CloudAsia.

The Chapter, which will be managed by elected office bearers, has identified five key technology themes that represent hot areas of interest in the local user and professional community: public cloud, private cloud, cloud security, healthcare cloud and smart nation cloud. These themes were presented at the cloud pillar sessions at CloudAsia on 28 and 29 October.

SCS President, Howie Lau giving his keynote address at CloudAsia



Office	Name	Organisation
President	Mr Martin Yates	Dell
Vice-President	Dr Lee Hing Yan	Infocomm Development Authority of Singapore
Vice-President	Dr Wu Horng Jyh Paul	SIM University
Honorary Secretary	Ms Sona Saha Das	Dell
Honorary Treasurer	Mr Alastair Welsh	IGEL Technology
Committee Member	Mr Raju Chellam	Dell
Committee Member	Mr Chris Chin Sze Ynan	Microsoft
Committee Member	Mr Lee Kok Yong	Accenture
Committee Member	Mr Gary Lim Choong Wu	Microsoft
Committee Member	Mr James Liu	Amazon Web Services
Committee Member	Dr Anton Ravindran	RapidStart
Committee Member	Mr Thomas Wee	M1



Applaudable Apps at SCS SPLASH AWARDS 2015



The explosion of infocomm media solutions has brought about apps for nearly everything under the sun – from dating to health and fitness, food delivery, photo and video, and instant communication. Surprisingly though, little focus has been given to two of the most time-consuming activities in our lives – work and education. The winners of our Splash Awards set to tackle this paradox.

This year marks the 12th edition of Splash Awards, one of the longest running student Infocomm competitions in Singapore. To date, the competition has attracted over 1,750 teams and 3,834 participants, engaging the brightest youths to nurture their skills and passion for infocomm media technology.

The Splash Awards winning team last year came up with the app "Apple Tree" to encourage users to spend more face time with friends and family. This app went on to convert digital apples to charity dollars in support of Code for Charity when it was launched at the IDA's Young Tech Festival on 10 September.

READY, SET, RE-IMAGINE!

This year, the competition challenges 86 teams of 214 participants to move beyond SG50 and take on future challenges head on through the theme "Beyond 2015: Education and Work – Reimagined."

Eventually, Team 3osy from Nanyang Polytechnic topped the Tertiary category by impressing judges with their "Happy Working Lor" app that hopes to inspire Singaporeans to take pride in their jobs. Team RevUp from NUS High also emerged as champion in the Pre-tertiary category with their eponymous app which aims to make revision easy, effective and efficient.

WANTED: TOMORROW'S TECH WHIZZES

Believing that there are many talented youths who – with the right support, mentorship, training and advice – can contribute to Singapore's burgeoning infocomm media ecosystem, SCS is dedicated to student talent development and connecting youths with working professionals through our Student

Chapters and our IT Youth Council. Besides frequently organising events and activities such as the Youth Engagement Series and networking sessions, SCS also has an IT Youth Award that recognises and honours youths 25 years and younger who have shown outstanding achievements in innovation, research undertakings and projects in the infocomm and media arena.



We congratulate the champion teams, Special Award winners, and other finalist teams.

TERTIARY CATEGORY

Rank	Team Name	School
Champion	3osy	Nanyang Polytechnic
Merit Award	3xclusive	Singapore Polytechnic
Merit Award	CE	ITE College East
Merit Award	Quest	Singapore Polytechnic
Merit Award	SIDMExcel	Nanyang Polytechnic

PRE-TERTIARY CATEGORY

Rank	Team Name	School
Champion	RevUp	NUS High
Merit Award	Blue	Raffles Institution
Merit Award	inScribe	Hwa Chong Institution
Merit Award	SkillzMap	Raffles Institution
Merit Award	Unbelievable	Zhonghua Secondary



Special Award MOST INNOVATIVE IDEA

Team Name: Quest
School: Singapore Polytechnic



Special Award TOP PERFORMING SCHOOL

School: Nanyang Polytechnic



Do check out details on the SCS website www.scs.org.sg.

Tech & Entrepreneurship Skills for All

There is a revolution going on. Disruptive innovations in technology are transforming businesses. To stay relevant in the new economy, you need to gain 21st century tech skills.



Career Shifters

Most have the misconception that pursuing an ICT career requires deep technological skills. However, we can help transition you into a hybrid Business IT professional. We will complement your business or operations experience with ICT skills training in fields like enterprise resource planning.

Tech professionals

Tech professionals need continuous skills upgrading to prevent obsolescence. We can help you acquire new ICT skills and transition into exciting new technologies such as big data, business intelligence, cybersecurity, and more.



Enterprises

In today's digital economy, there's intense competition in attracting and retaining talents. As your training and talents partner, we help recruit talents and deliver training programmes for just in time deployment in your workplace.



Everybody else

To survive in the new economy, you need to be innovative, agile, and be digitally savvy. We provide you bite-size courses that enable you to remain effective in the digital workforce.



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Company Registration Number: 200202841R

ERF Registration Period: 6 August 2014 to 5 August 2018

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Cert Nos: EDU-2-2032

Validity: 28/12/2011 - 27/12/2015



7

TIPS FOR BETTER NETWORKING

For many, walking into a room and introducing themselves to strangers is a daunting prospect. As a result, many miss out on networking as an effective tool to form connections. In this issue of *The IT Society*, Suren and Tommy from ITYC provide simple and practical solutions to make networking work for you and I.

1

Be confident

Confidence comes from the belief you have in yourself. Practice and prepare mentally. Everyone loves a person who can carry himself/herself well. Iron your shirt and dress well, but try not to overdress.

The key takeaways from career talks and seminars tend to be along the lines of "networking is very important" and that "networking can take you places and open up opportunities." However, not many speakers delve into what networking is and how to network. Here are seven tips on networking that will help you make better progress and form stronger connections.

7

Follow up

Send a thank-you note, make a phone call and arrange a meet up. Have a short write up on the conversations you have had and pen it in your follow-up note. It helps jog the other party's memory.

2

Learn the art of small talk and listening

Great conversations often start with a little bit of banter. Prepare a few starting questions such as "How was your day?"; "What are you currently doing?" Also, think of some simple follow up questions before the event.



Suren Rastogi
Member, SCS
Committee Member
SCS IT Youth Council

Tommy Tien
Member, SCS
Committee Member
SCS IT Youth Council



6

If you are shy, prepare ahead

If you are naturally shy and have difficulty starting a conversation, prepare a list of questions beforehand. The easiest icebreakers revolve around food and travel. After all, who doesn't like to eat and explore the world? Another great strategy is to anchor yourself near the food buffet. Simple conversations could start with "How is the food?" Or if you have a cool gadget, use that. You never know when a techie will come up to you and ask "what is that on your hand?"

3

Set yourself apart by thinking before you speak

When keeping up the flow of conversation, don't forget to listen to the other person. Always pause to think about what you're going to say. These one or two seconds may feel long to you, but if something intelligent comes out, the delay would be well worth.

4

Diversify

Don't stay too long with one person, you might miss out on other opportunities. The goal is to get to know someone well enough to make an impression, take his or her name card, and follow up with them later.

5

Never ask for anything

Pushing for a job, sale or meeting is a sure way of leaving a bad impression. Networking sessions are meant for building relationships and following up later. Deeper connections take time. Keep your exchange fun, light and informal.

Networking is easy. With practice, networking can become as natural as catching up with friends or family. More importantly, it remains to be one of the best tools available for building meaningful contacts in the industry.



Infocomm Professionals and Students are Optimistic about the Industry

More local infocomm (ICT) professionals indicate intentions to remain in the industry while ICT students display greater interest in ICT studies and pursuing the profession.

Fewer ICT professionals indicated that they have an intention to leave the industry as compared to the 2011 survey. As shown in Figure 1, less than two in 10 ICT professionals indicate that they have intention to leave the industry in 2014, vis-à-vis three in 10 ICT professionals in 2011. Largely, ICT professionals attribute their attraction and passion for the ICT profession to career advancement opportunities, salaries, respect and prestige in the ICT profession relative to other occupations.

In terms of career progression, the survey observed that while technical skills remain essential especially for the IT technical professionals, soft skills such as interpersonal and business skills were cited as complementary skills required for progression to the next level (Figure 2).

Where ICT students are concerned, 97% of ICT university students and 74% of polytechnic students currently in ICT disciplines reported that ICT was one of their top three choices of study (Figure 3). Primarily, they were drawn to ICT studies because of interests, the opportunity to work across different industries and their inclination to pursue an ICT career. In addition, while the students perceive ICT jobs to be challenging, they felt that ICT jobs add value to businesses and offer opportunities for training, development and up-skilling.

"We're very pleased to note the overall enthusiasm and improvement in results for Singapore ICT industry's benchmark survey conducted by SCS. The latest barometer readings bode well for the future of the Singapore ICT industry in terms of job creation and investments attraction. Besides making stronger contributions to our economy, there are also the prospects of driving local innovation both locally and increasingly on the world stage," said Mr Howie Lau, President of SCS.

Figure 1:

Intentions to Leave the ICT Industry (2009 – 2014)

Disagree
Neutral
Agree

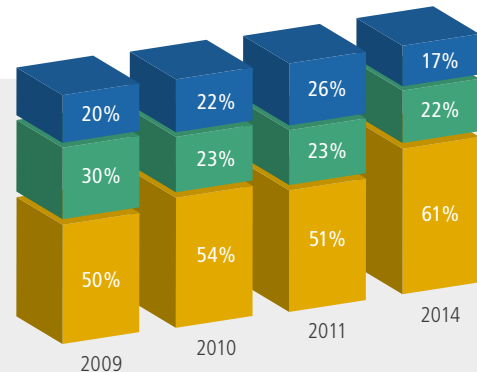


Figure 2:

Competency Requirement for Current Job and Progression to the Next Level

Current Job
For Next Level

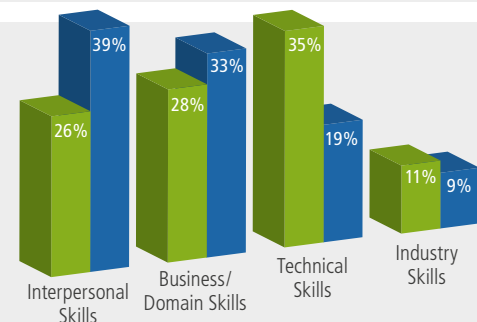
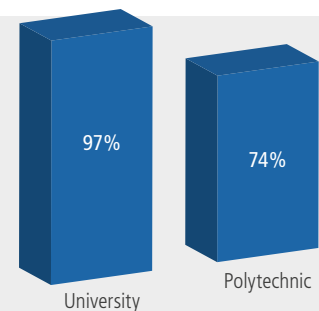


Figure 3:

ICT as One of the Top Three Choices of Study among ICT Students



BACKGROUND INFORMATION OF INFOCOMM SURVEY

This annual survey, which is into its fourth instalment reaches out to over 1,300 respondents to understand the needs and issues concerning ICT professionals and students so as to guide SCS and government agencies in shaping ICT policies and strategies. Organisations can also accordingly align their strategies for ICT human resource skills development.

This ICT study, that was conducted in the last quarter of 2014, is commissioned by SCS, administered by the Nanyang Business School, Nanyang Technological University, and supported by Infocomm Development Authority of Singapore, Singapore Workforce Development Agency, Accenture, Internet Society, Lithan Hall Academy, Ngee Ann-Adelaide Education Centre and ST Electronics (Info-Software Systems).



Technopreneurship SIG Launched at YES!



Chak Kong Soon

What are the steps to take when transforming your ideas into reality and how do you kick-start your business? Answers to these questions, along with many ideas, were shared by founders of start-ups at the Youth Engagement Series (YES!) – “Launchpad to Technopreneurship” event held in conjunction with the launch of the Technopreneurship Special Interest Group (SIG) on the morning of 21 November at Bistro 1855, Suntec City.

Aiming to address the growing relevance of Technopreneurship in Singapore as well as to promote and nurture a culture of innovation and entrepreneurship among infocomm professionals, the Technopreneurship SIG will be organising mentorship and networking programmes for tech start-ups, specifically in the business to business segment. There will also be seminars, dialogues and partnership with other industry bodies to help start-ups.

TECHNOPRENUERSHIP SPECIAL INTEREST GROUP

Chairman	Chak Kong Soon (Stream Global)
Committee Members	Mohan Belani (E27)
	Saurav Bhattacharyya (Quantum Inventions)
	Dora Chua (Singapore Polytechnic)
	Jit Nagpal (Science Consulting)
	Jeffrey Nah (Venture Capital)
	Giridhar Nayak (Sambaash)
	Gloria Ng (ISS)
	Joshua Soh (ACE)
	Yap Neng Giin (Microsoft)



Check out further details at www.scs.org.sg/SIG/sig-tnr.php.

Coming Out Tops in Bits and Bytes

SCS is proud to honour and recognise 17 outstanding talents from Singapore's institutes of higher learning for their excellent work and outstanding achievements in the pursuit of professional knowledge. Join us in congratulating this year's winners of SCS Academic Prizes and Medals!

“The IT Industry is constantly evolving — with new opportunities arising in tandem with new challenges — but through knowledge, perseverance and a relentless drive to excel, success is certain!”



Ashok Balasubramanian
National University of Singapore
Masters of Computing (Infocomm Security)

SCS ACADEMIC PRIZES AND MEDAL	WINNERS
National University of Singapore	
SCS Gold Medal and Prize for the Best Student in Infocomm Security Specialisation (Masters of Computing)	Ashok Balasubramanian
SCS Gold Medal and Prize for the Best Student in Project Management Specialisation (Masters of Computing)	Kwan Chun Wah
Ngee Ann-Adelaide Education Centre	
SCS Book Prize for Most Outstanding Student (Bachelor of Computer Science)	Ho Wei Jun Eugene
Singapore Management University	
SCS Best Final Year Student Award (Bachelor of Science – School of Information Systems)	Koh Kar Chian
Singapore University of Technology and Design	
SCS Award for Top Final Year Student in ISTD Pillar	Swayam Narain
SCS Award for Outstanding Final Year Students in ISTD Pillar	Toh Yong Cheng Ong Ruo Cheng Roger Natalie Agus
University of Newcastle Singapore	
SCS Gold Medal Award for Outstanding Achievement (Bachelor of Information Technology)	Teo Yu En Sheryl
Nanyang Polytechnic	
SCS Award for Outstanding Project Work (Diploma in Information Technology)	Chew Rong Kang Wong Kang Fei
SCS Award for Outstanding Project Work (Diploma in Financial Informatics)	Ang Shi Ya
Ngee Ann Polytechnic	
SCS Silver Medal & Prize (Diploma in Information Technology)	Sim Tong Gerald
SCS Silver Medal & Prize (Diploma in Multimedia & Animation)	Yao Jiaqi
Singapore Polytechnic	
SCS Silver Medal (Diploma in Information Technology)	Loh Fuxing
SCS Silver Medal (Diploma in Infocomm Security Management)	Iassc Lee Bo Xi
SCS Silver Medal (Diploma in Business Information Technology)	Tan Hui Yee



Forging Friendships on the Greens

SCS Golf Day 2015

Fun, smiles and networking opportunities were aplenty on and off the greens as over 160 golfing enthusiasts gathered at the hilly courses of Orchid Country Club on the afternoon of 28 August for SCS Golf Day 2015.

After a hearty lunch, the most eagerly awaited golfing event amongst avid golfers and friends from the infocomm community teed off amidst fair weather. Like golf professionals, the participants made their way across the stunning greens.

Rounding up the day, participants were treated to a sumptuous dinner at Peach Garden restaurant and entered for a lucky draw featuring attractive prizes such as the latest smart TV, tablets, digital cameras and sports gadgets.

SCS Golf Day 2015 was a delightful success thanks to the support of our SCS members, industry leaders and generous sponsors.

If you have missed this event, you can always join us at SCS Golf Day 2016!

Novelty Prizes

<i>Nearest the Pin Aranda #2</i>	Khoong Hock Yun
<i>Nearest the Pin Aranda #6</i>	Dennis Tan
<i>Nearest the Pin Dendro #4</i>	Tim Greisinger
<i>Nearest the Pin Dendro #8</i>	Robert Yap
<i>Nearest the Pin Vanda #2</i>	Tan Chang Huong
<i>Nearest the Pin Vanda #4</i>	Patrick Ang
<i>Nearest the Line Dendro #1</i>	Kelvin Wong
<i>Nearest the Line Vanda #5</i>	Kelvin Wong
<i>Nearest the Line Aranda #9</i>	Leon Lee Tae Hui
<i>Best Gross</i>	Lim Keng Hoe

Individual Tournament Prizes

Dendro – Vanda Course

<i>Winner</i>	Steven Lee
<i>2nd</i>	Wong Hon Kwong Tom
<i>3rd</i>	Mark Ablett
<i>4th</i>	Listar Nguyen
<i>5th</i>	Kelvin Tan

Vanda – Aranda Course

<i>Winner</i>	Lim Keng Hoe
<i>2nd</i>	Leon Lee Tae Hui
<i>3rd</i>	Lian Tian Tse
<i>4th</i>	Daniel Poon
<i>5th</i>	Vincent Teo

Aranda – Dendro Course

<i>Winner</i>	Ng Yen Pin
<i>2nd</i>	Robert M C Yap
<i>3rd</i>	Ng Han Kim
<i>4th</i>	Lu You Ming
<i>5th</i>	Lawrence Wu

Golfers having a fun time on the greens.



▲ Cheers to a wonderful evening!



Golfers all geared up ►
for a great game!



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Hitachi Data Systems
Hewlett-Packard Singapore
Infocomm Development Authority of Singapore
IDA International
IX Technology
M1
NCS
NEC Asia Pacific
Network For Electronic Transfers (S)
Originex (Singapore)
Palo Alto Networks
Pulley Ascent (Asia)
Singapore Pools
Singapore Telecommunications
Singapore Technologies Electronics
Transition Systems
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Orchid Country Club
Peach Garden
Phil Brew Golf Academy
PTC System (S)
Singapore Pools
SPH Magazines
Telescience Asia

Myanmar IT Professionals can Now Get CITPM

SCS signed a Memorandum of Agreement (MOA) with Myanmar Computer Professionals Association (MCPA) on 31 August 2015 to introduce Certification in IT Project Management (CITPM).

Under the auspices of the MOA, MCPA aims to train and certify 1,000 infocomm professionals in CITPM over the next three years, which is expected to boost the competencies of the IT project management professionals in Myanmar. The inaugural CITPM examination is scheduled for the first quarter of 2016.



SCS Membership Crosses 31,000!

Our membership has been growing from strength to strength over the past decade and the Society is proud to be the home of 31,000 infocomm enthusiasts today!

A big "Thank You" goes out to our members – for your continued support of SCS.

Leverage this powerful network of infocomm professionals in leading a smart nation. Join us as we power ahead with activities and benefits that enable you to:



Stay informed with our seminars, workshops, site visits and career sessions on industry standards, latest developments and emerging trends.



Connect with fellow members and industry partners to build your business networks.



Engage in active discussions about the dynamic technology scene with chapters and special interest groups.



Be in the know of exciting happenings in the SCS milieu.

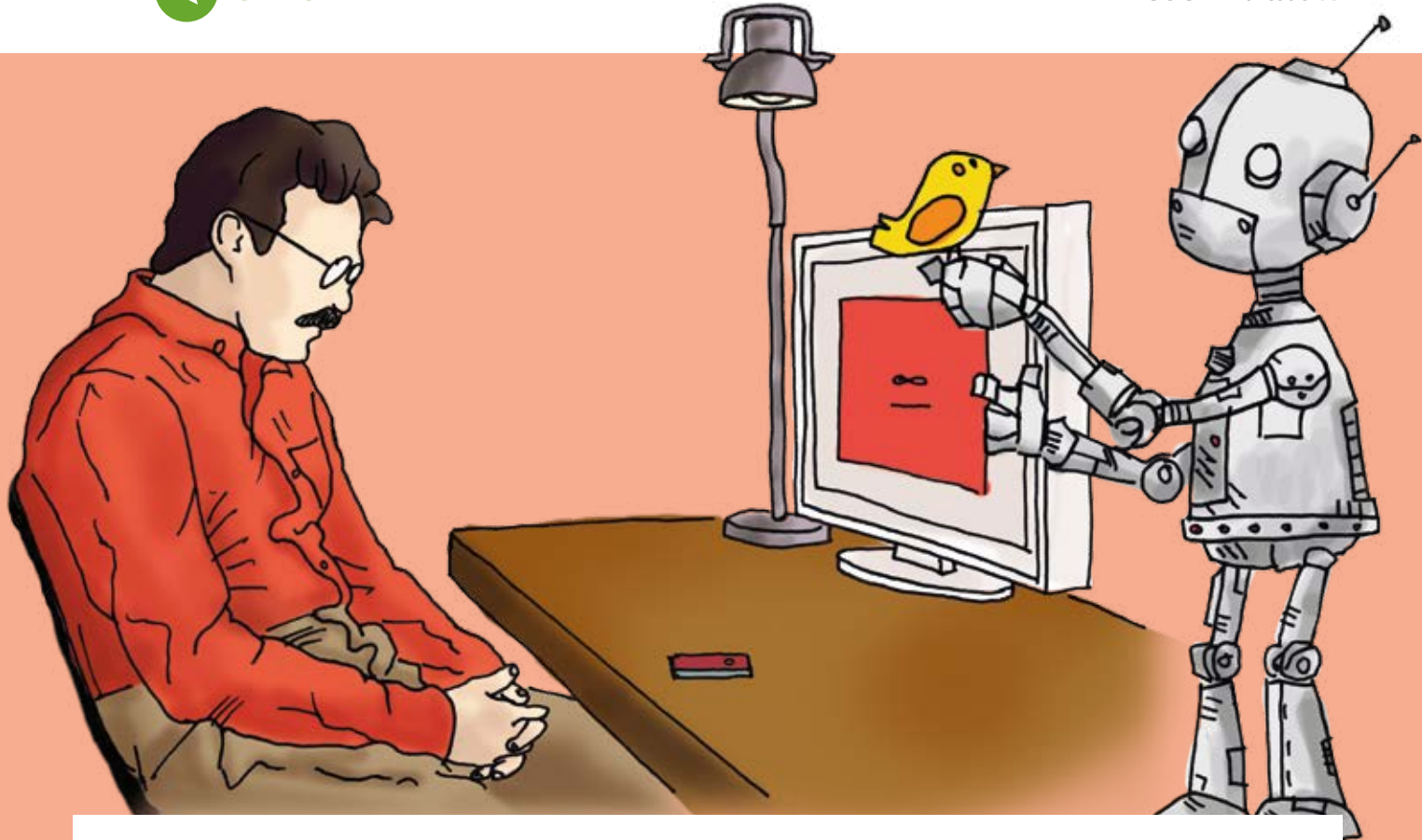


Chart your career developments through access to InfoPier – your infocomm registry and online resource portal comprising upcoming trends, latest training calendar and job openings.



Sign up or renew your SCS membership at the SCS website www.scs.org.sg. For more details, contact the membership secretariat at membership@scs.org.sg.





The New Meaning of IT

There is no doubt that there will come a day when almost every conceivable interaction will be between a human user and a robotic provider. And the Turing Test will cease to be relevant.

As it stands, every form of artificial intelligence with a processor 30 times smaller than an average brain is smarter than half the planet. These algorithms – accurate, consistent, adaptive – can learn and react to human responses in real-time with such precision that they seem to know you better than yourself.

Just take a look at your smartphone. Siri sounds sexier than a lot of women I know. *And she talks back if you dare insult her.*

Think that's a customer service officer you're chatting with on that website?

Nope.

Those are automated responses triggered by preset conditions derived from your browsing. Gone are the robots with a robotic voice. In place are human voices. The day has come for Iron Man's Jarvis and KITT from 'Knight Rider' to join us in our daily lives.

Perhaps one day, like how Theodore fell in love with Samantha in 'Her', a 2013 American romantic science fiction film, love will no longer be a solely human experience. Machines will practice eusociality across species. Can you imagine a phone sacrificing itself for our children? *Although the reverse is more true today. Hmm.*

Information Technology is fast becoming Intuitive Technology.

ARE YOU READY FOR THE CHANGE?

Rising Cyberspace Threats Driving Demand For IT Professionals With Cybersecurity Skills



**CURRICULUM ALIGNED
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Your enthusiasm for getting 'hands-on' with technology will be satisfied by a very practical approach to learning. The course content for the network modules is closely aligned with CISCO Networking Academy's Certified Network Associate (CCNA) training course.

BACHELOR OF SCIENCE (HONS) COMPUTER SECURITY

This programme is designed to provide a broad, general education in the theory and practice of engineering and computing technologies with special emphasis in the area of computer security and network systems.

BACHELOR OF SCIENCE (HONS) COMPUTER & NETWORK TECHNOLOGY

This programme is designed to be challenging for students to demonstrate their full potential with respect to computer networking, software development and computer hardware in relation to modern digital communications systems.

OPPORTUNITY TO OBTAIN CISCO CAREER CERTIFICATIONS

Upon completion of the degree programme, you can upgrade yourself by obtaining CISCO Career Certifications such as CISCO Network Associate (CCNA) Routing and Switching, which will enhance your employability and marketability.

ADVANCED STANDING

Applicants with relevant local polytechnic diplomas and other certificates may be awarded exemptions for up to 2 modules.

LEARNING APPROACH

Use of CISCO integrated services router, CISCO catalyst switches and Security Honeypot for practical learning, coursework, project reports with minimal examination.

GLOBAL RANKING & ACCREDITATION



Ranked 35th in The Guardian University Guide 2015 - League Table for Computer Science and Information Systems.



The delivery of these programmes in the UK is accredited by the British Computer Society, the Chartered Institute for IT for the purposes of fully meeting the academic requirement for registration as a Chartered IT Professional which is internationally recognised.

DURATION

Full-time programme: 16 months
Part-time programme: 20 months

INTAKES

Jan, May & Sep



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