



# "Understanding Deep Learning"

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The Institution of Engineers, Singapore (IES)
Electrical, Electronics and Computer
Engineering Technical Committee
(EECETC)

&

**Temasek Polytechnic** 

Date:

1 February 2018 (Thursday)

Time:

7 pm – 9 pm (1900 hours to 2100 hours)

Registration, Networking & Dinner starts at 6.15 pm (1815 hours).

Venue:

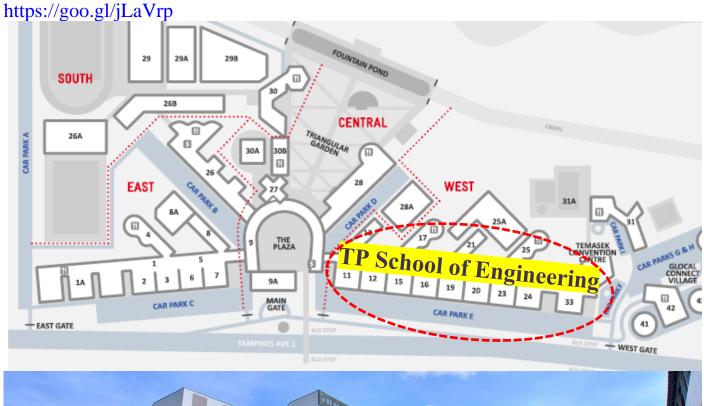
EN23-1-47 (Lecture Theatre 54), Ground Floor

**Block 23, School of Engineering (locate in front Carpark "E")** 

**Temasek Polytechnic** 

21 Tampines Avenue 1

Singapore 529757







CPD/ PDU:

PEB PEs and IES CEngs (for all engineering branches/disciplines and/ or engineering branches/ disciplines listed in <a href="http://charteredengineers.sg/branches/">http://charteredengineers.sg/branches/</a>); Pending approval/confirmation.

Fees:

S\$32.10/- per pax – for IES, Co-Organizer(s) and/ or Supporting Partners' Members.

All price(s) is/are inclusive of prevailing GST, and dinner.

S\$64.20/- per pax – for Non-Members.

# Please click **HERE** to book/ secure your registration.

## **Synopsis**

**D**eep learning is currently one of the most successful machine learning method in both its learning ability and flexibility in application in different areas. Deep Learning had also captured the public imagination as Google AlphaGo defeated numerous world champion in the ancient game of GO. As deep learning applications spreads into all field, it became obvious that engineers from all field must have a better of it.

In this talk, we will have a travel through the journey and milestones of the growth of Deep Learning. These throwback would help us better understand how the essential components and their importance. Next we would briefly go into some basic of Deep learning theory to have a basic understanding of the technology.

Then we would go through the basic learning framework and also the some learning strategy. We would also examine some of the popular open source Deep Learning framework such as *Tensorflow*, *Keras*, *Caffe* and etc. We would also look into case studies to understand how to apply Deep learning.

## Speaker's CV/ Profile

Mr. Teo Kok Keong graduated with an Honors Bachelor's Degree in Electrical and Electronics & Engineering majoring in Communication from Nanyang Technological University (NTU). Driven by his passion in research, he holds a Masters Degree in Engineering by research from NTU specializing in signal processing, data processing, artificial intelligent and computing.

His thesis is on "Time Series Prediction using Wavelet Neural Network". He had published two international conference papers for his research work.

Before joining Temasek Polytechnic as a lecturer, he had vast working experience in major MNC specializing in R&D, software development, project management and team management. During his course of work he had filed three Patent applications and two conference papers based on his innovative solutions.

https://www.researchgate.net/profile/Teo\_Keong

## **Programme**

Time	Event
6.15 pm	Registration and Networking & Dinner
7.00 pm	Talk/ Presentation 1: "Understanding Deep Learning"  – by Mr. Teo Kok Keong, Lecturer, Computer Engineering, School of Engineering, Temasek Polytechnic
9.00 pm	Presentation of Token of Appreciation
9.05 pm	End

## **Media Reports/ Quotes**

### Global FinTech Hackcelerator and **2017** FinTech Award winners...

OpenGov Asia-16 Nov 2017

Global FinTech Hackcelerator and **2017** FinTech Award winners announced at **Singapore** FinTech Festival ... detection of fraudulent transactions using hybrid **deep learning** and machine learning algorithms and enabling payments through mobile phones with or without internet connection, leveraging on...

## Diving deep into S'pore's fintech ecosystem

The Business Times-12 Nov 2017

The top 20 applicants include **Singapore's** Sqreem, an artificial intelligence platform that uses "autonomous, self-assembling, **deep learning**" algorithms to map human behaviour. Sqreem says it can determine intent, outlook, influence, and decision based on data analysis of patterns and relationships in...

## HR professionals in Singapore can expect to earn up to S\$400ka year

Human Resources Online-23 Nov 2017

As inflation rates in **Singapore** likely to remain flat, significant salary increases are unlikely. However ... Additionally, employers will also look out for business/consumer-facing professionals with **deep learning** and machine learning skills, UX/UI professionals, and tech professionals with cyber security skills.

#### Is This Town Big Enough?

Asian Scientist Magazine-27 Nov 2017

In particular, artificial intelligence (AI), machine **learning** and big data have generated much interest and excitement, not to mention plentiful investments. Just in **2017** alone, the government launched a new program called AI **Singapore** with US\$110 million at its disposal to boost the nation's AI capabilities;...

#### SGInnovate to invest in 20 **deep**-tech startups

The Straits Times-29 Nov 2017

SGinnovate's aims were announced yesterday as part of a new "**Deep** Tech Nexus" strategy to further strengthen **Singapore's deep**-tech start-up ... version of this article appeared in the print edition of The Straits Times on November 30, **2017**, with the headline 'SGInnovate to invest in 20 **deep**-tech startups'.

## SGInnovate to focus on Artificial Intelligence, Blockchain and ...

OpenGov Asia-29 Nov 2017

It aims to leverage off **Singapore's** strengths in academia and scientific research and create globally relevant companies by filling a gap in 'business-building' capabilities. By the end of **2017**, SGInnovate will have completed equity investments in 15 **deep** tech startups, played a part in generating 400...

## Making the elevator pitch

The Business Times-12 Nov 2017

We asked four of the **Singapore** fintechs that participated in ADGM's fintech event for their best elevator pitch. ... It aims to deliver good risk-adjusted returns by harnessing the power of AI and machine **learning** made possible by affordable massive computing power combined with real-time financial data to...

## Giving AI A Fair Trial

Asian Scientist Magazine-27 Nov 2017

28, **2017**) – By Jeremy Chan – Laws are a reflection of what society holds dear and seeks to protect, and thus far, they have been applied by humans, .... "What we need to do is further explore what can be done with machine learning and **deep learning** to improve productivity and decision making, to get to...

## SDxCentral's Weekly Roundup — December 8, 2017

SDxCentral-8 Dec 2017

SDxCentral's Weekly Roundup — December 8, **2017** ... The company also opened its Asia Pacific regional headquarters in **Singapore**. Canonical partnered with Rancher Labs to ... Mellanox partnered with NEC to launch artificial intelligence platforms for high performance and **deep learning** data centers.

### **Online Registration & Payment Modes**

Please visit HERE to register online and transact payment via your VISA/ MasterCard or other appropriate modes.

#### All fees payment via cheque

Account payable/ crossed Cheque to 'IES' via post

(At the back of your Cheque, please indicate your Name and **UDL2018**)

Postal Address:

The Institution of Engineers, Singapore

70 Bukit Tinggi Road, Singapore 289758

Attention: Mr. Colin Fong

#### All Fees Can be Transacted via Island-wide AXS Kiosks

Please download <a href="https://www.ies.org.sg/axs/AXSprocedure.pdf">https://www.ies.org.sg/axs/AXSprocedure.pdf</a> for more information.

Please select/ input/ key in: -

Course/ Event ID

Remarks

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Please keep, retain and furnish your proof of payment(s), receipt(s) or e-receipt(s), if any, during registration.

#### **Contact Person**

Colin Fong (e): colin.fong@iesnet.org.sg (d): +65 6461 1236 (t): +65 6469 5000

#### Other Details, Information and Remarks

Confirmation of registration will be emailed within 7-working days prior to the Seminar's commencement date.

In the event, you are not able to attend, please duly inform us in writing at least 3-working days before the Seminar's commencement date. Otherwise, full payment is applicable if you are not able to attend the Seminar.

The Institution and/or the Organiser(s) reserves the right to make appropriate changes at its discretion although every effort will be made to inform participants in time.

# Fees is/ are inclusive prevailing GST and Dinner.

### # If vegetarian meal is required, please indicate during your online registration.

- # Seminar's duration excludes registration, meal and/ or break time(s).
- # For IES, Co-Organiser(s) and/ or Supporting Partners' Members; please input your Membership Number accordingly, register online and transact payment via your VISA/ MasterCard or other appropriate modes.
- # For Non-members; please register online and transact payment via your VISA/ MasterCard or other appropriate modes.
- # Alternative payment method via AXS Kiosks is valid for all prescribed fees.
- # Only 1 (one) replacement request is allowed per application/ applicant/ registrant. However, when an IES, Co-Organiser(s) and/ or Supporting Partners' Member is replaced by a Non-member, the Participant has to pay the difference in the prescribed fees.
- # No certificate of attendance will be issued, however, an email will be sent within 14 to 21-working days after the event to certifying your attendance.
- # Accreditation of CPD PDU for Professional Engineers Board Singapore (PEB) Professional Engineer/ Attendee; your Name and Reg. PE Registration Number will be filed to PEB, normally within 14 to 21-working days after the Seminar.
- # Accreditation of CPD PDU for IES Chartered Engineer/ Attendee; your Name and Reg. C.Eng Registration Number will be filed to IES C.Eng Professional Registry, normally within 14 to 21-working days after the Seminar. CPD PDU for IES C.Eng will be duly accredited/ awarded correspondingly/ similarly to those approved/ confirmed by PEB.