



Strategy and Synergy for Security



# National Workshop on Deep Learning for Cyber Security 6<sup>th</sup> - 7<sup>th</sup> March 2020



Organised by

**Society for Electronic Transactions and Security (SETS)**

*in association with*

**IEEE Computer Society, Madras Chapter, ACM, Chennai Chapter & ISACA, Chennai Chapter**

## Deep Learning for Cyber Security (DLCS)

More sophisticated attacks like ransomwares, cyber-physical attacks evolve everyday. It has become highly important to understand the information security flow in the organization beyond Anti-Virus. Artificial Intelligence is extending its frontier in almost every technology.

This curriculum will introduce the participants to the basics of deep learning with an eye towards cyber security. Developing skills on Artificial Intelligence has become more important than ever in the cyber domain, from identifying threat vectors to defending the organisation's assets against adversarial AI attacks. The generalisation power of Deep Learning has become a silver bullet to many problems in cyber security.

## ABOUT SETS

Society for Electronic Transactions and Security (SETS) was set-up as a premier Research Institution to work in the area of Information Security under the Office of the Principal Scientific Adviser to the Government of India. It has established an Advanced Facility in Information Security and Cryptology working in the research areas of Information Security as Knowledge Centre with the following objectives:

- Knowledge Creation in Cryptology, Hardware Security and Network Security to meet the specific long-term and short-term needs of the Nation
- Knowledge Application by translating the knowledge created into solutions/products to meet the specific needs of the organizations in collaboration with academia and industry
- Knowledge Dissemination through sharing its expertise by organizing training programs, workshops and national conferences

### The workshop focusses on:

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| <ul style="list-style-type: none"> <li>• Artificial Neural Networks/ Machine Learning/Deep Learning</li> <li>• Trends in AI for Cyber Security</li> <li>• Applications of ML in Cyber Security</li> <li>• Supervised Learning- CNN &amp; RNN for Cyber Security</li> <li>• Identification of Phishing Websites using DNNs</li> </ul> | <ul style="list-style-type: none"> <li>• Unsupervised Learning in Neural Networks- Auto Encoders and RBMs for Spam Filtering</li> <li>• Machine Learning based DDoS Detection and Mitigation</li> <li>• Cybersecurity and Deep Learning- Intelligence through Data Integration</li> <li>• Cryptomodule Identification in Malwares</li> <li>• Transfer Learning for Cyber Security</li> </ul> |
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<b>TARGET PARTICIPANTS</b>		<b>PRE-REQUISITES</b>	
<ul style="list-style-type: none"> <li>• Engineers, Scientists, Faculty, Professionals working in the area of Cyber Security and AI</li> <li>• Researchers / PG Students</li> </ul>		Knowledge in Computing, Network and Cyber Security Essentials	
<b>COURSE FEE</b>		<b>LAST DATE</b>	
<b>Rs. 3,000/- (Includes GST)</b> It includes Kit, Working Lunch, Tea and Snacks.		Registration fee along with registration form should be sent to the Coordinator on or before 2 days of the each training programme starting date.	
<b>Venue:</b> Society for Electronic Transactions and Security (SETS), (Under O/o the Principal Scientific Adviser to the Govt. of India) MGR Knowledge City, CIT Campus, Taramani, Chennai – 600 113			<b>Website:</b> <a href="http://www.setsindia.in">www.setsindia.in</a>
<b>All communications should be addressed to:</b> <b>Dr. P. Nageswara Rao</b> Training Coordinator Email: <a href="mailto:training@setsindia.net">training@setsindia.net</a> Mobile: 9884143131 Phone: 044 –66632506		<b>For Technical Details:</b>	
		<b>Ms. Eswari Devi</b> Technical Coordinator Email: <a href="mailto:eswari@setsindia.net">eswari@setsindia.net</a>	<b>Ms. M. Samyuktha</b> Technical Coordinator Email: <a href="mailto:samyuktha@setsindia.net">samyuktha@setsindia.net</a>