



Society for Electronic Transactions and Security  
IEEE Life Members Affinity Group Madras  
IEEE Computer Society Madras  
Association for Computing Machinery Chennai  
Computer Society of India Chennai

**Cordially invite you for the IEEE Computer Society DVP Talk (hybrid mode) on  
The AI-Cybersecurity Nexus: The Good and the Evil**



### **Dr. San Murugesan**

Director, BRITE Professional Services  
Adjunct Prof., School of Computing, Western Sydney University  
Distinguished Visitor, IEEE Computer Society  
Distinguished Speaker, Association for Computing Machinery

**Date: Friday, 2nd Sep 2022 :: Time: 11 am to 1 pm IST**

**Venue: SETS Auditorium, MGR Knowledge City, Taramani, Chennai - 600113 (close to IIT Madras Research Park)**

**Programme: 11 am -- Tea :: 11.30 am -- Talk :: 1 pm -- Lunch**

**Pl. register at <https://bit.ly/3dokSjG>**

#### **About the Talk**

Cyberattacks are now a major concern for everyone — IT professionals, businesses, governments, and individuals. The attacks on our digital systems are increasing and harsher than ever, and their impacts are serious and devastating. Furthermore, security risks are no longer confined to businesses and governments; they stretch across every major sector — health, manufacturing, logistics, utilities, and education, for example. As security threats grow in number, severity, and sophistication, protecting data, computer systems, and critical infrastructure against cyberattacks is now more demanding and challenging and calls for continuously renewed strategies and new approaches.

AI will be helpful — and already is — to combat cyberattacks. It's also going to be beneficial to cyber criminals. Bad actors are using AI — and will continue to use more intensively — to create sophisticated, harmful cyberattacks that are more difficult to detect and address. Worse still, they are also trying to compromise AI impacting the very application AI is employed to protect as well as numerous other applications. So, a comprehensive fresh examination of the potential and perils of the AI-cybersecurity nexus would help us to address the perpetual concern of cybersecurity.

In this talk, San Murugesan will outline the three facets of the AI-Cybersecurity nexus. Then he'll discuss the role and importance of AI in cybersecurity and how AI can assist us to protect our 'living digital world' against traditional cyberattacks and emergent threats, illustrating real-world examples. He'll also examine the dark side of the AI-cybersecurity nexus: how adversaries can exploit AI to launch sophisticated attacks and the need to protect the AI as it is vulnerable to new kinds of cyberattacks. Finally, he'll outline the nexus's current status and benefits of using AI to power cybersecurity solutions, and offer a few recommendations for building a more secure digital future.

#### **About the Speaker**

Professor San Murugesan is the Director of BRITE Professional Services and an Adjunct Professor in the School of Computing at Western Sydney University. He is a former Editor-in-Chief of the IEEE Computer Society's IT Professional magazine. He served in both academia and industry in several senior roles, and his expertise and interests span a range of areas: artificial intelligence, autonomous systems, quantum computing, sustainability, green computing, cloud computing, and IT trends. He edited or co-edited 12 books and 40 journal special issues, authored 17 book chapters and 17 reports on contemporary topics in IT, and widely published in quality journals.

Before the current roles, he worked as a Senior Research Fellow at the NASA Ames Research Center in California and served as a professor of computer science at Southern Cross University in Australia. He also worked at the ISRO Satellite Centre (now known as UR Rao Satellite Centre) in Bangalore where he led the development of onboard electronic systems for attitude control of several early Indian satellites.

Murugesan is a fellow of the Australian Computer Society, IETE, and IICA. He is a Golden Core member and Distinguished Contributor (charter member) of IEEE Computer Society and a Life Senior Member of IEEE. Currently, he is IEEE Computer Society's Board of Governors member and Magazines Operations Committee chair. He is a Distinguished Speaker of ACM and a Distinguished Visitor of the IEEE Computer Society. He is a recipient of IEEE Computer Society's highest service award, "Distinguished Service Certificate" in recognition of his "wide-ranging significant contributions." For further information on his contributions, see his Web page: [www.tinyurl.com/san1bio](http://www.tinyurl.com/san1bio)

**Please register at <https://bit.ly/3dokSjG>**