Machine Learning and its Role in the Internet of Things (IoT) Analytics

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Overview

The Internet of Things (IoT) has already found its way in diverse set of applications. Examples include connected cars, smart agriculture, connected home, smart grid, and numerous industrial control systems. Along with this explosive growth, we are also witnessing increased risks to security and privacy. IoT systems are often highly complex, requiring end-to-end security solutions that span cloud and different connectivity layers. Traditional security solutions are unsuitable for resource-constrained IoT devices.

Recent advances in machine learning mark another exciting milestone in the evolution of computer science. It is natural to consider the application of learning techniques to secure IoT. In this course, we will explore security vulnerabilities unique to IoT architecture, learn how to establish a baseline of the operational characteristics, and to flag anomalies that deviate from this baseline. There is a significant experiential component to this short course. At the same time, it also covers the research trends, challenges, and open problems in this exciting field.

Modules	**A:** Machine Learning and its Role in the Internet of Things (IoT) Analytics**: Dec 4 - Dec 8, 2017** **Number of participants for the course will be limited to fifty.**
You Should Attend If…	▪ you are a student or faculty from academic institution or industry person interested in learning how to secure IoT
Fees	The participation fees for taking the course is as follows: **Participants from abroad : US $100** **Industry/ Research Organizations: Rs 4000** **Faculty Members from Academic Institutes: Rs 2000** **Students/Research Scholars: Rs 1000** The above fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hr free internet facility. The participants will be provided with accommodation, if available, on payment basis.

The Foreign Faculty

Prof. Ramakrishna "Ramki" Thurimella is currently the Director of Cybersecurity, University of Denver, Colorado, USA. He has a PhD from University of Texas at Austin. He has vast experiences in both industry and academia. His primary research interests include IoT, Machine Learning and Security & Privacy.

The Host Faculty

Dr. Samrat Mondal is an Assistant Professor of Department of Computer Science & Engineering, Indian Institute of Technology Patna. His research interest is Security & Privacy and Database & Data Mining.

Dr. Arijit Mondal is an Assistant Professor of Department of Computer Science & Engineering, Indian Institute of Technology, Patna. His research interest interests include Deep Learning, CAD for VLSI, Smart Grid Technology.

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