



Research Topics in Cybersecurity

Dr. Irfan Ahmed*

Assistant Professor (Computer Science)
Virginia Commonwealth University
(VCU), Richmond, VA (USA).

PIEAS Lyceum | **10.30 AM, Monday**
Jan 06, 2020



***Details on the leaflet attached.**

Contact: Dr. Muhammad Shafiq Siraj, Coordinator PIEAS Colloquia

Phone: +92-51-2207380-5 Ext. 3062, +92-332-894-1945

Email: mssiraj@pieas.edu.pk

PIEAS Colloquium

“Research Topics in Cybersecurity”

PIEAS Lyceum on Monday, 06 Jan 2020 (10.30 AM)



Dr. Irfan Ahmed

Assistant Professor
(Computer Science) Virginia
Commonwealth University
(VCU), Richmond, VA (USA).

Affiliations:

- Director, Security and Forensics Engineering (SAFE) Lab, Department of Computer Science, Virginia Commonwealth University, VA (USA).
- Director, Security and Forensics Engineering (SAFE) Lab, Department of Computer Science Virginia Commonwealth University, VA (USA).
- Faculty Fellow VCU Cybersecurity Center, Richmond, VA (USA).
- Advisory Board Member of Cybersecurity Sacred Heart University, Fairfield, CT (USA).
- Member IEEE Computer Society Technical Committee on Security and Privacy, ACM Special Interest Group on Computer Science Education (SIGCSE), American Academy of Forensic Sciences (AAFS).

ABSTRACT:

This presentation will discuss research problems in cybersecurity with a particular focus on digital forensics, industrial control systems (ICS), and system virtualization. The research problems include memory forensics, virtual machine introspection, and control logic injection attacks and defenses. The presentation will target both undergraduate and graduate students who are interested in research projects. To help the students understand real-world cyberattacks and raise their interest in cybersecurity, the FU rootkit, and a man-in-the-middle attack will also be demonstrated.