Invited Talk Department of Computer Science and Engineering IIT Kanpur

IoT Devices— A Curse in Disguise by

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Abstract

Without us even knowing it, the connected devices in our homes and businesses can carry out nefarious tasks. Increasingly, the Internet of Things (IoT) has become a weapon in hackers' schemes. This is possible in large part due to manufactures' failure to program basic security measures into these devices. Now, experts in the U.S. are asking regulators to step in. Calls for public policy to improve device security have reached a fever pitch following a series of high-profile denial-of-service attacks leveraged in part by unsuspecting DVRs, routers, and webcams. In October, hackers flooded the Internet service company Dyn with traffic by assembling millions of IoT devices into a virtual botnet using a malicious program called Mirai. Norwich University has established a designated IoT Forensics Center with the sole purpose of finding solutions to these threats. In this talk we will discuss how these devices are a threat to the Internet. How vulnerable they are and how they can be exploited.

Speaker Bio: Akshay Awasthi is the Founder of Authentic Techs. With over 5 years of experience, he along with his team have been conducting information security Consultancy & Training sessions across the globe. Akshay has 5-year experience in cyber security with specialization in information security and digital forensics. He has delivered workshops and seminars on "Ethical Hacking and Cyber Security" in various leading institutions across India, and online in the United States of America. Trained around 8000 personnel that includes students, research scholars, and industry professionals from Microsoft, Wells Fargo etc. Akshay is currently serving as a chair for the IoT Forensics Center at Norwich University, Center for Advanced Computing Digital Forensics. Akshay is also involved with various federal projects in the U.S. in association with the Peace & War Center at Norwich where he also serves as the co-lead and chief technical advisor for the team P2P: A State Department Initiative.