
Cybersecurity in the Age of Smart Cities - Challenges and Solutions

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ABSTRACT

As the Internet of Things and smart cities become integral parts of our environment, the associated cyber risks are all too real. Smart cities contain IT, OT and IIOT environments at different scales, which are dependent on each other at variant degrees but not managed centrally. Attacks against smart grids and IoT devices could mean the loss of data or the loss of life. It's imperative that we start addressing these issues collaboratively.

This talk will explore the systemic risk and challenges that come with securing smart city initiatives and how the Global Cyber Alliance (GCA) is developing solutions for reducing this risk, leading a global effort with partnerships in the public and private sectors, to address smart city security issues.

GCA has conducted roundtables with experts and practitioners across the globe, including in London, Singapore, Portland, New Orleans, and NYC to bring communities together to provide solutions that can be leveraged for more secure global smart city environments.

GCA's effort includes technical and non-technical solutions for security challenges around IoT deployments in smart cities, building a global honeyfarm network through which GCA can collect threat intelligence on attacks targeting IoT devices, creating a first-of-its kind IoT Cyber Range, and developing an ecosystem where we enable the edge network devices to make smarter decisions about the threats they face. Session attendees will also learn how to engage with GCA and join our efforts to protect smart cities.

BIOGRAPHY

Adnan Baykal is the Global Technical Advisor for the Global Cyber Alliance, a nonprofit organization whose mission is to eradicate cyber risks around the globe. Before taking this role, Mr. Baykal served as Vice-President of Operations at the Center for Internet Security (CIS), an internationally recognized nonprofit organization that provides cybersecurity services and support to state, local, tribal, and territorial governments throughout the United

States. Mr. Baykal oversaw all technical incident response and forensic analysis activities for CIS and for the Multi-State Information Sharing and Analysis Center (MS-ISAC).

Prior to this role, Mr. Baykal served as the Vice-President of Security Services as well as the Director of the CIS Cybersecurity Emergency Response Team (CERT). As the Director of CIS-CERT, he managed a highly select group of expertly skilled individuals responsible for providing rapid cybersecurity and incident response services to all state and local governments across the United States. Mr. Baykal is acknowledged internationally as a technical expert in cybersecurity.

With over a decade of experience leading complex operations in large-scale network monitoring, incident response, computer forensics and malware analysis, Mr. Baykal has become a global resource for detecting, identifying, analyzing and combating cyber threats on enterprise systems and networks. Over the course of his career, Mr. Baykal has supported public and private sector enterprises in increasing their cybersecurity posture and in improving their practice.

With academic degrees in both applied mathematics and in computer science, he worked closely with the FBI, the United States Secret Service, and other federal, state, and local law enforcement agencies using his cybersecurity expertise and operational experience. His engaging ability to clearly explain complex technical subjects has made him a much sought-after subject matter expert.