Jesus Molina

Security Analyst

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OBJECTIVE:
To explore opportunities as a Security Analyst in an organization working in the industrial internet. Provide vendor neutral recommendation on security decisions, from policy to implementation.

QUALIFICATION SUMMARY:
The ability to serve as a security analyst by ensuring security planning, testing, verification and risk analysis in accordance with the different industrial security standards and the Industrial Internet Security Framework. Capable of working at different levels, from policy and standards, to threat evaluation and implementation. Extensive experience with security standards, evaluating IoT security, and conducting security research. Respected leader in the security community with experience evaluating and compromising live systems. Experience with international markets and standards, including Japan and Europe.

RECENT ACTIVITIES:
- Security Chair at the Industrial Internet Consortium
- Author and editor of the Industrial Internet Security Framework
- Member of the World Economic Forum security and safety network
- Organizer of the IoT Sandbox at the RSA security conference
- Security evaluations of Fujitsu industrial internet testbeds

KEY COMPETENCIES:

- Research security products and understand challenges to protect the evolving industrial internet
- Leadership positions in organizations with global security outreach
- Conduct security research, from patent to prototype
- Write new security policy, standards and frameworks for industrial systems
- Experience conducting architecture reviews and audits in industrial internet experimental testbeds
- Evaluation of IoT and IIoT products and supply chain security
- Research new developments in industrial security in order to recommend, develop and implement new security policies, standards, procedures and frameworks.

PROFESSIONAL EXPERIENCE:
Information Security Analyst, JM consulting 2011-2016

- Leadership position at the Industrial Internet Consortium representing Fujitsu Ltd.
- Identified vulnerabilities, recommend corrective measures and ensure the adequacy of existing information security controls for industrial systems.
- Educated the community in conferences, including BlackHat, Defcon and IoT world congress. Appear in several panels on industrial system security.
- Prepared detail reports on IoT and IIot security practices and drat recommendation with a global outreach.
- Evaluated security practices and standards across regions, including Japan, USA and Europe.
- Created threat testing cloud platform to evaluate distributed systems, including OpenStack and Cloud Stack

- Served in several standard bodies and organizations, including NIST, NSF, OASIS, DMTF and CSA representing different companies.

Security Researcher, Fujitsu Ltd. 2005-2011

- Performed security research, analysis and design for hardware and software.
- Develop patents on systems and protocols, including wireless payment systems, self-erasable memories, trust anchors and authentication of containers.
- Developed, implemented, and documented formal security programs and policies.
- Created hardware prototypes for cloud trusted anchors, independent system auditors, wireless payment systems and trusted execution environments.
- Represented Fujitsu in global standard bodies and conference.
- Chair and board member at the Trusted Computing Group

SELECTED TALKS

- Speaker at IIC Security Forum, Sunnyvale VA, October 2016 : Managing and Monitoring the Industrial Internet of Things
- Speaker at RSA USA 2016: When Good Devices Go Bad: Live Hacking at the IoT Sandbox
- Panelist at Iot Wold Congress 2015: IoT Security
- Speaker at BLACKHAT 2014: Learn how to control every room at a luxury hotel remotely: the dangers of insecure home automation deployment

SELECTED PUBLICATIONS

- Multiple Authors. Industrial Internet Security Framework. Industrial Internet Consortium. September 2016
- J. Molina. 2007. Evaluating Host Intrusion Detection Systems. Ph.D. Dissertation. University of Maryland at College Park, College Park, MD, USA
- J. Molina and M. Cukier. 2009. Evaluating Files to Audit for Detecting Intrusions in FileSystem Data. In Proceedings of the 2009 Eighth IEEE International Symposium on Network Computing and Applications
- N. L. Petroni, J. Molina, T. Fraser, W. A. Arbaugh. Copilot: A Coprocessor Based Runtime Integrity Monitor. 13th Usenix Security Symposium 2004)

EDUCATION:
University of Maryland, College Park, MD. Ph.D. in Electrical Engineering, 2007.
Dissertation: Evaluating Host Intrusion Detection Systems Advisor: Michel Cukier

University of Maryland, College Park, MD. M.S. in Electrical Engineering, 2001.
Dissertation: Using Independent Auditors for Intrusion Detection Systems
Advisor: William A. Arbaugh

Universitat Politecnica de Catalunya, Spain. Bachelor in Ingenieria de Telecomunicaciones, 1999.
Dissertation: Hardware Implementation of an Authentication Protocol Using Kerberos