Department of Industrial, Systems, and Manufacturing Engineering
Seminar Presentation

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Title: **Cybersecurity in Additive Manufacturing**
Date: Friday – April 05, 2019
Time: 11:00 am – 12 noon
Location: Engineering Building (EB) Room 211

Abstract

Manufacturing systems are rapidly adopting the Internet of Things (IoT) to improve their efficiency and productivity. However, the IoT also introduces cyber-vulnerabilities that can be exploited by sophisticated adversaries to sabotage their operations. A particularly serious cyberattack against manufacturing systems is the defect injection attack. In such attacks, a compromised machine fabricates objects with deformed geometry, weak material composition, abnormal dimensions, etc., which pose a great risk to safety-critical applications. In this two-part talk, we will first introduce the fundamental principles of cybersecurity, and then discuss recent developments in security for additive manufacturing systems.

Speaker Biography

Sergio A. Salinas Monroy received the BS degree in Telecommunications Engineering from Jackson State University, Jackson, in 2010, and the PhD degree in Electrical and Computer Engineering from Mississippi State University, Starkville, MS, in 2015. He is currently an Assistant Professor in the Department of Electrical Engineering and Computer Science, Wichita State University, Wichita, KS. His research interests include security and privacy in cyberphysical systems, cloud computing, and big data. He is a member of the IEEE and ACM.