Professor Saraju P. Mohanty

Department of Computer Science and Engineering
Award-Winning Author and Editor
Research Funding: NSF, SRC, Air Force, IUSSTF, Mission Innovation
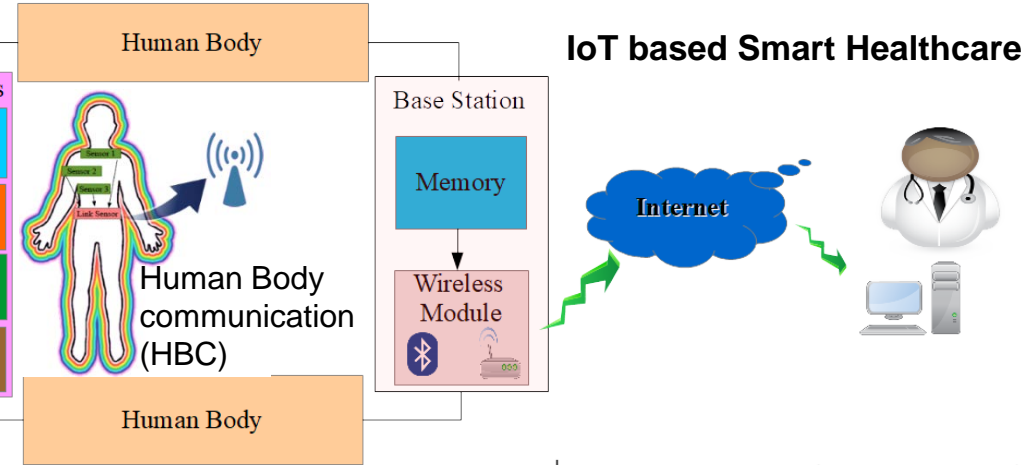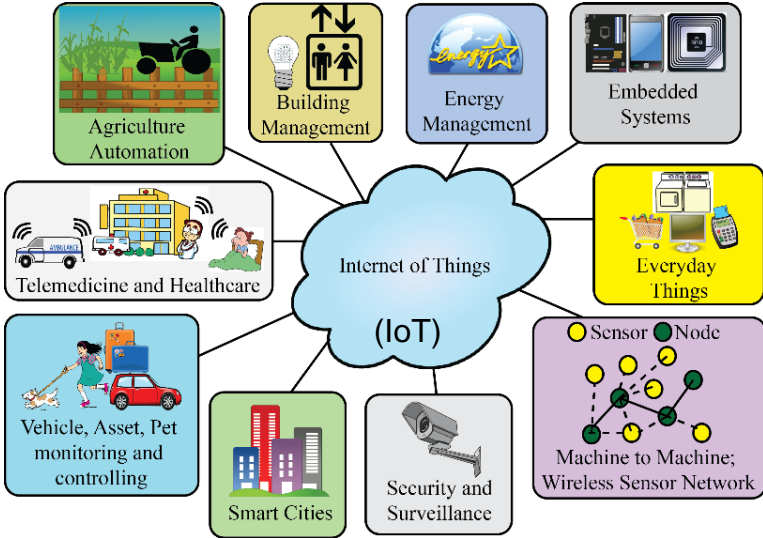**Research Group:** 6 Ph.D. Students, Smart Electronic Systems Laboratory (SESL)
Research Products: 280 peer-reviewed articles, 4 US patents, 3 books, 29 h-index, 90 i10-index, 9 Ph.D. dissertations, 26 M.S. theses, 2 post-doctoral mentoring
Research Keywords: Consumer Electronics, Smart Cities, Smart Healthcare, Internet-of-Things (IoT), IoT Security, Hardware-Assisted Security, Smart Electronics, Smart Sensors, VLSI Circuits and Systems
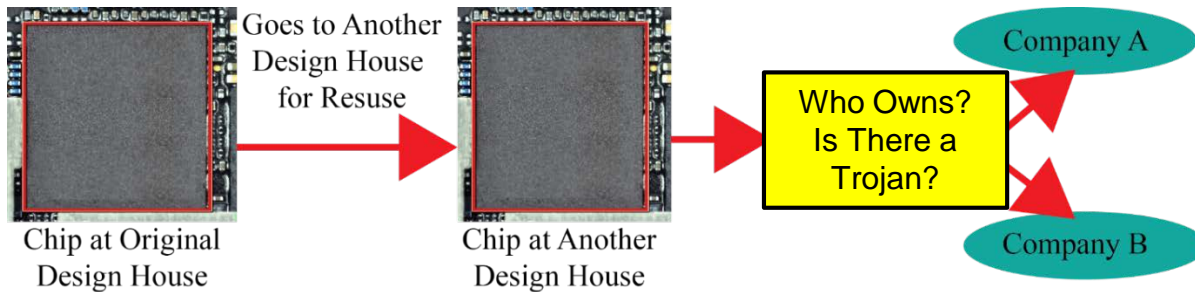**Website:** http://www.smohanty.org

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Smart Electronic Systems Laboratory (SESL) UNT EST. 1890 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING COLLEGE OF ENGINEERING

Consumer Electronic Systems for Smart Cities

Agriculture Automation
Building Management
Energy Management
Embedded Systems
Telemedicine and Healthcare
Internet of Things (IoT)
Everyday Things
Vehicle, Asset, Pet monitoring and controlling
Smart Cities
Security and Surveillance
Sensor Node; Machine to Machine; Wireless Sensor Network

Human Body
Array of Sensors
pH Sensitivity
Temperature Sensor
Gyroscope
Proximity Sensor
Human Body communication (HBC)
Base Station
Memory
Wireless Module
Human Body

IoT based Smart Healthcare

Internet

Hardware-Assisted Security

Goes to Another Design House for Resue

Chip at Original Design House

Chip at Another Design House

Who Owns? Is There a Trojan?

Company A

Company B

Electronic System with Security and Protection Capability

Secure Digital Camera

Lens / Shutter/ Mirror
Active Pixel Sensors
Analog-to-Digital Converter
Scratch Memory
Liquid Crystal Display (User Interface)
Object
Shutter Controller
Key
Encryption Unit
System Controller
DSP
USB
Bar Code Unit
Watermark Unit
Compression Unit
Flash Storage
--- Control
— Data

NSF
SRC Semiconductor Research Corporation
UNITED STATES AIR FORCE
IUSSTF
MISSION INNOVATION Accelerating the Clean Energy Revolution
IEEE