Abstract: Advances in mobile and pervasive computing, social network technologies, and the exponential growth in Internet applications and services will lead to the development of the next generation of Internet services that are pervasive, ubiquitous, and touch all aspects of our life. The Internet of Things (IoT) will connect not only computers and mobile devices, but it will also interconnect smart buildings, homes, and cities, as well as electrical grids, gas, and water networks, automotive and airplanes, etc. However, IoT resources and advanced information services will make security a grand challenge. In this work we will show an attack surface and will introduce a threat model to analyse security problems of the IoT, design mitigation strategies, and evaluate solutions.

Bio: Masters in Computer Science by the Technological Institute of Hermosillo, Mexico. PhD. Student in The University of Arizona at the Electrical and Computer Engineering department. He is a research assistant in Autonomic Computing Laboratory (ACL). His research interest includes cyber security for smart infrastructures and cyber-physical systems.