Abstract:
Human factors and usability have traditionally played a limited role in the development of secure computer systems. Security experts have largely ignored usability issues since they: a) often failed to recognize the importance of human factors; and b) lacked the expertise to address them. That being said, there is a growing recognition that addressing issues of usability and human factors can contribute to solving today’s security problems. There is increasing agreement that we need to design secure systems that people can actually use. The challenge, however, is the lack of consensus on how to achieve this goal. In this talk, a brief introduction about user-centric security is provided. The field of user-centric security sets the foundation for addressing this challenge by balancing between security and usability. More specifically, several examples on user authentication are presented to: a) highlight the trade-offs between security and usability; b) state-of-the-art solutions; and c) future directions in this field. At the end of this talk, the audience should have a basic grasp of the parameters that should be accounted for when designing usable and secure computer systems.

Bio:
Manar Mohamed is a PhD Candidate in Computer and Information Sciences at the University of Alabama at Birmingham (UAB). She has received her M.S. and B.S. in Computer Science from the Arab Academy for Science, Technology and Maritime Transport in Alexandria, Egypt. She has over six years of teaching experience. She has published several papers, which appeared at prime computer science venues, including ASIACCS, USEC, ICME, Percom, ACSAC, and CODASPY.