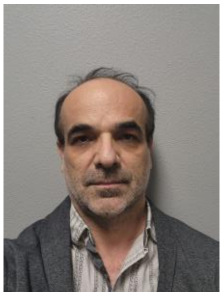

Title: Agentic AIs: A Fascinating Technology for Building the Next Generation of Cybersecurity Analytics

Abstract:
Generative AIs, and in particular, Large Language Models (LLMs) have drastically changed almost all business sectors and technological practices. These emerging technologies have the capability to transform our daily life through automation that would help in making informed data-driven decisions. As a critical application domain, the field of cybersecurity domain can benefit substantially of these sophisticated technologies by enabling security analysts in analyzing security data and detecting potential cyber threats in real-time, a daunting problem that prevented advancement of technological development of AI-powered cybersecurity solutions. This talk will first review the state-of-the-art of security practices and then shed some lights on the areas that benefit the most from AI-powered automation and data-driven reasoning using agentic AIs in cybersecurity. More specifically, the talk will review some case studies in which Generative AIs and LLMs have successfully applied for automated threat detections and analysis of threat intelligent systems and reports. The talk then discusses the challenges that these AI-powered technologies may cause in assisting not only security control experts, but also cyber security adversaries in launching sophisticated cyber-attacks that are stealth and smart enough to remain undetected during attacks.

Bio:
Dr. Akbar Namin is a full professor in Computer Science at Texas Tech University where he directs the Center for the Science and Engineering of Cyber Security (CSECS). Namin earned his Ph.D. in Computer Science from Western University, Canada. Namin's research is in cyber security, machine learning, Reinforcement Learning, Large Language Models (LLM), software engineering, and human AI interactions. Namin has authored over 120 scientific papers and research articles appeared at premier professional venues and journals. Namin has been the guest editors of several scientific journals. He has founded the Advanced Socio-Technical Analytics Research Lab in Computer Science Department with over 10 Ph.D. and 80 Master's students graduated. His research lab conducts multidisciplinary research projects in various areas including human factors in cyber security and humanized AI through Reinforcement Learning. The National Science

Foundation (NSF) and The Office of Navy Research (ONR) fund his scholarly work in cyber security research and education. Namin is a Fulbright U.S. scholar visiting the St. Polten University of Applied Sciences, Department of Computer and Security, Austria, in 2025.