

PROF. HOSSEIN SARRAFZADEH

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Hossein Sarrafzadeh is a University Distinguished Professor and the Director of the Center of Excellence in Cybersecurity Research, Education and Outreach at NC A&T State University. He has worked in the areas of IoT, data mining and machine learning in cybersecurity and cybersecurity in Smart Cities and Smart Grid Security. He has founded several cybersecurity research and operation centers in NZ, Australia and the US.



He has a number of inventions and patented systems in computer vision, cybersecurity and cloud security. Dr. Sarrafzadeh has published over 180 research articles and secured over \$15M funding in the past 5 years.

Title - Cybersecurity threats, opportunities, and possibilities for international collaboration in research and education

With the significant increase in the amount of time we spend online, combined with the overwhelming amount of data being produced, the significance of cybersecurity has continued to grow substantially. The growing volume and sophistication of cyber attackers and attack techniques complicate the problem even further. This keynote address will discuss the current global issues and cybersecurity threats of national significance and the relevant research that can help reduce the risks globally. This presentation aims to stimulate research interest in researchers and graduate students. Projects in the areas of cybersecurity monitoring and alerting, smart grid security, election security, biological information processing and security, health security and drone security will be presented. The idea of Earn-As-You-Learn Programs in cybersecurity workforce development is discussed and security operations centers (SOC), SOC on Wheels and cybersecurity health checks, are presented as examples. Areas of global threat and important areas for education and research are highlighted at the conclusion.