

ogy and Systems) program. The SaTC program is a large cross-cutting research program at NSF and the largest unclassified cybersecurity research program in the world. As a program director, she surveyed the entire breadth of U.S. and international science and technology advancements in wireless networks and cybersecurity. Equally valuable is the opportunity to work together with a group of knowledgeable and highly competent fellow program directors. During this period, Prof. Lou managed to maintain her research team and high research productivity at Virginia Tech [4-8]. After returning to the University in 2017, Prof. Lou continued her research with much greater vision from her NSF experience. Her recent research has focused on critical cyber infrastructure security, and her work includes blockchain and consensus protocols [9-10], trustworthy AI systems [11], and security and privacy in 5G/nextG mobile networks [12] and cyber-physical systems [13]. With the increasing size of her research team and projects, she is further expanding her research collaborations with researchers at other universities.

Prof. Lou is a prolific scholar. To date, she has over 250 journal and conference publications, many of which have been published in top venues and are highly cited. Per Google Scholar, she has over 37,800 citations and her h-index is 79, which makes her one of the top-cited and most influential researchers in her field. Her work has earned her an international reputation for quality, innovation, and impact. She has received a number of best paper awards, including a distinguished paper award at ACM ASIACCS 2013 [3], the Fred W. Ellersick best paper award at the IEEE MILCOM 2019 unclassified program [14], and a best paper award at IEEE INFOCOM 2021 [15]. In 2020, Prof. Lou's paper, "Achieving Secure, Scalable, and Fine-Grained Data Access Control in Cloud Computing" (with 2,500+ citations) [1], published in the IEEE INFOCOM 2020 Proceedings, received the prestigious IEEE INFOCOM Test of Time Paper Award. Prof. Lou was elevated to IEEE Fellow in 2015 for her contributions to information and network security. In 2018, she was honored with the Alumni Award for Excellence in Research at Virginia Tech, the highest University-level research award that can be bestowed on a faculty member.

In addition to her accomplishments in research, Prof. Lou is also active in contributing her time to serve the research community. She has served as chair of many technical program committees for major conferences. She was the Founder and past Steering Committee Chair of the IEEE Conference on Communications and Network Security (CNS). Her extraordinary leadership skills demonstrated in this effort were widely recognized by the research community. She has served as an editor for a number of IEEE transactions and journals. While serving as a NSF Program Director, she spearheaded new directions in the fields of wireless networks and cybersecurity, promoted international research collaboration through international programs, and mentored junior research members. She has been a highly sought-after speaker for numerous keynotes on cybersecurity topics in conferences and workshops. She has been invited to participate in many funding agencies' visionary workshops to shape future research directions. As a female researcher, Prof. Lou has been actively engaged in many diversity and broadening-participating activities. She is a frequent speaker on the subject at various conference and workshop venues,

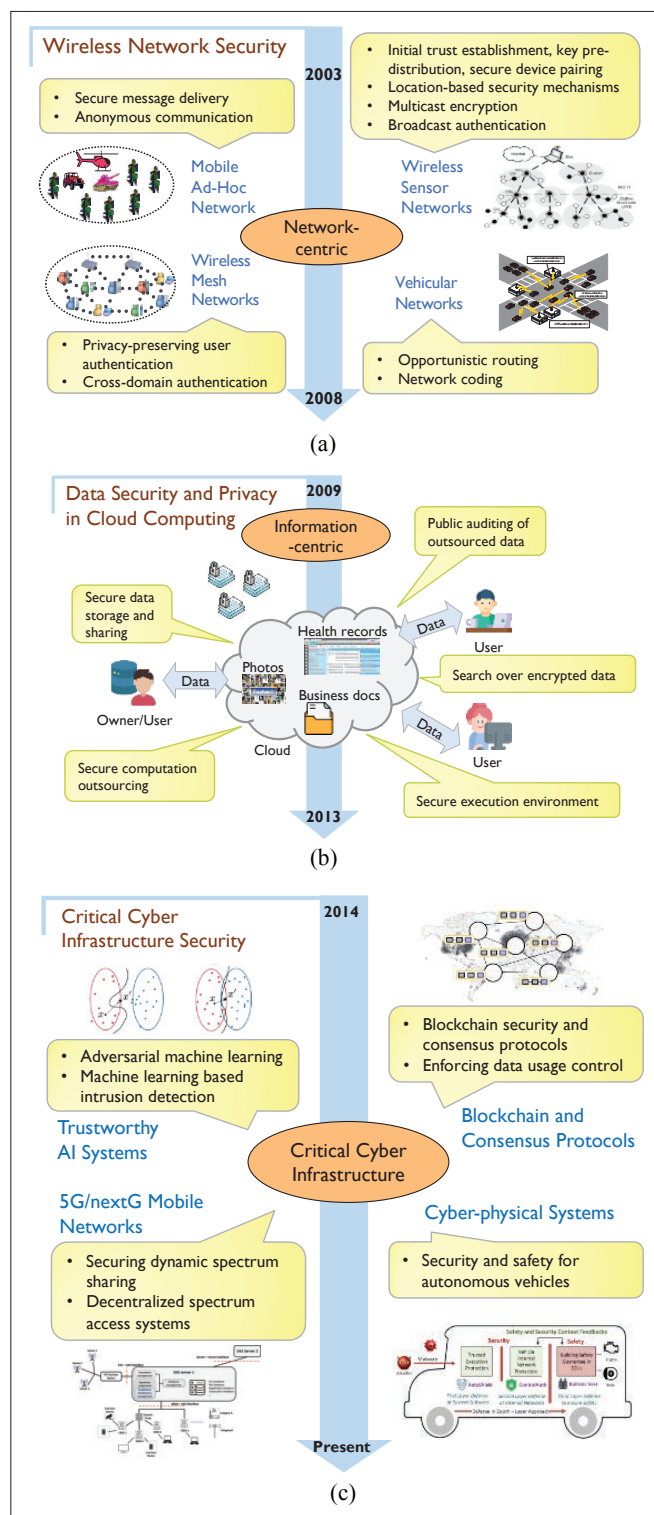


FIGURE 2. Research path illustrated: (a) research work on wireless network security; (b) research work on data security and privacy in cloud computing; (c) research work on critical cyber infrastructure.

including the N2Women event at many conferences (e.g., IEEE INFOCOM, IEEE GLOBECOM, ACM SIGCOMM).

According to Prof. Lou, one of the most rewarding aspects of being a professor is working with graduate students, fostering their growth, and witnessing their successes in their career paths. Prof. Lou has an extraordinary graduate

student mentoring record. She has always put an emphasis on quality over quantity. Over a period of 18 years, she has graduated 13 Ph.D. students, three M.S. students, and currently is supervising another seven Ph.D. students. Eight of her graduated Ph.D. students hold tenured/tenure-track faculty positions in major research universities in the U.S. and three of them have received the prestigious NSF CAREER Awards. Prof. Lou takes great pride in her students' success. She continuously offers her students mentoring and support, especially in the early stage of their academic careers.

As a world-class researcher in her area, Prof. Lou attributes her success to her passion for cutting-edge research, hard work and perseverance, the blessing of working with a group of outstanding graduate students and collaborators, and the support from her family. She has enjoyed being a professor and is enjoying it more as time goes by. She is always ready to tackle the next challenge and is looking forward to extending her contribution to the research community and society in the many years ahead.

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