

Bio:

Dr. Frederic Rizk is an assistant professor in the Department of Electrical and Computer Engineering and the director of the Center for Advanced Research in Intelligent Systems and Emerging Technologies (CARISSET). He earned a Bachelor of Engineering in Computer and Communication Engineering, ranking first in his class and graduating Summa Cum Laude from Notre Dame University. Dr. Rizk completed his M.S. and Ph.D. degrees in Computer Engineering from the University of Louisiana at Lafayette, an R1 Carnegie classification institution. He also completed a postdoctoral Research fellowship at the University of Louisiana at Lafayette and subsequently worked as a Research Scientist at the Informatics Research Institute.

Dr. Rizk's research focuses on the dynamic relationship between software and hardware. His interests include artificial intelligence, machine learning, deep learning, hardware security, and emerging technologies. He has worked extensively in areas such as physical unclonable functions (PUFs), social cybersecurity, high-performance computational systems, data science, hardware-software co-design, VLSI, and data privacy and security. By leveraging AI, Dr. Rizk develops innovative solutions to address real-world problems, enhancing the lives of individuals and communities through technological advancements. His work bridges theory and practical applications, with numerous publications in top-tier conferences and journals.

Dr. Rizk is a Professional Member of both the IEEE (Institute of Electrical and Electronics Engineers) and ACM (Association for Computing Machinery), two leading organizations in his field. He is also a proud member of the Order of the Engineer, an honor recognizing his commitment to the ethical and professional practice of engineering. In addition to his academic and professional achievements, Dr. Rizk has been recognized as a Goodwill Ambassador, volunteering with a variety of state and non-profit organizations to support community development.

Dr. Rizk has made significant contributions to academia through numerous publications in high-impact journals and conferences. He has also served as a reviewer for top-tier conferences and prestigious journals, as well as a judge for the Louisiana Region VI Science and Engineering Fair.

Awards & Honors:

- Rising STARs Award, The University of Texas System (2025)
- ULL Dissertation Completion Fellowship
- President's Award for Educational Excellence and Outstanding Academic Achievement
- Ragin's Leadership Academy Award
- Highest Honor Distinction for Exceptional Academic and Professional Achievements
- Phi Kappa Phi Honor Society, Life Member
- Professional Member, IEEE and ACM

Research interests:

- Artificial Intelligence (AI) and Machine Learning
- Deep Learning and Neural Networks
- Generative AI
- Hardware Security
- Physical Unclonable Functions (PUFs)
- Hardware-Software Co-Design
- VLSI and Emerging Technologies