



Faculty Member

Timken Foundation Center for Precision Manufacturing

Contact Information



Hamid Bahrami, PhD
Associate Professor
Electrical and Computer Engineering
University of Akron
ASEC Building, Room 351
302 Buchtel, Akron, OH 44325

Email: hrb@uakron.edu
Phone: 330-972-7940
Website: blogs.uakron.edu/bahrami

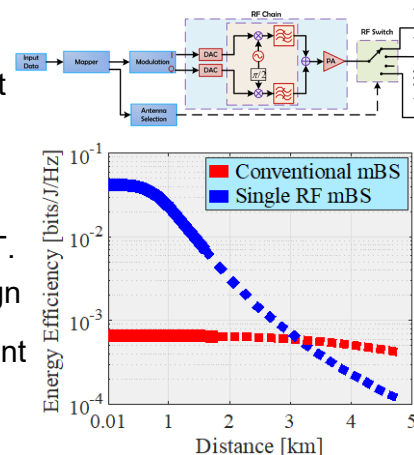
Research Interests

- Wireless Communications and Networks
- Signal Processing
- Cybersecurity
- Internet-of-Things
- Machine to Machine (M2M) Communications
- Industry 4.0
- Cognitive Computing and Communications
- Artificial Intelligence and Machine Learning
- Data Analytics

Sample Research I:

MIMO Communications for IoT Applications

- Multiple-input multiple-output (MIMO) communications is an enabling technology for current and future (e.g., 5G) networks.
- However, conventional MIMO terminals are complicated and power hungry, which makes them not suitable for use in IoT.
- This research addressed design of MIMO transceivers that are structurally simpler to implement and more power efficient than what is currently available.



Sample Research II:

Data Collection and Analysis for HVAC Systems

- Collection and analysis of data for HVAC systems for early diagnosis and prevention is highly important to HVAC industry.
- However, conventional HVAC systems are not connected and smart.
- This research addresses efficient and secure collection of HVAC data using near-field communication (NFC), as well as large-scale analysis of data for failure detection, prediction and prevention.

