- **Wireless and Mobile Communications**
  - Spectrum utilization and power allocation
  - Mobile edge computing
  - AI-enhanced security, reliability, and adaptability

- **Artificial Intelligence (AI) Applications**
  - AI vision for industrial inspection and automation
  - Neuromorphic computing for event-based vision
  - AI-assisted health analytics
  - AI-assisted molecule design for drug discovery
  - AI inference at the edge devices
  - Ensuring AI reliability and safety

- **Sustainable Sensors and Internet of Things (IoT)**
  - Energy-efficient communications and data analytics for IoT
  - Reliable and trustworthy IoT systems
  - RF energy transfer and harvesting