Department of Electronics and Information Engineering HUST

http://ei.hust.edu.cn

Brief introduction

- The department of electronics and information engineering was first established in 1960.
- Presently, we have:

  2200 undergraduate students

  650 master students

  190 doctoral students

Degree programs

- PhD, Master and Bachelor of:
  - Communication and information system
  - Signal and information processing
  - Electromagnetic field and microwave techniques
  - Circuits and systems
  - Space information science and technology

Faculty members

29 Professors

42 Associated Professors

79 Lectures

21 Technical staff

Research laboratory and Institute

- Institute of Broadband wireless communication
- Hubei Province Key Lab of Smart Internet technology
- STBE
  - State Teaching Base for Electrical and Electronics Engineering
- RosettaNet Center
  - RosettaNet China Huazhong Research & Development Center

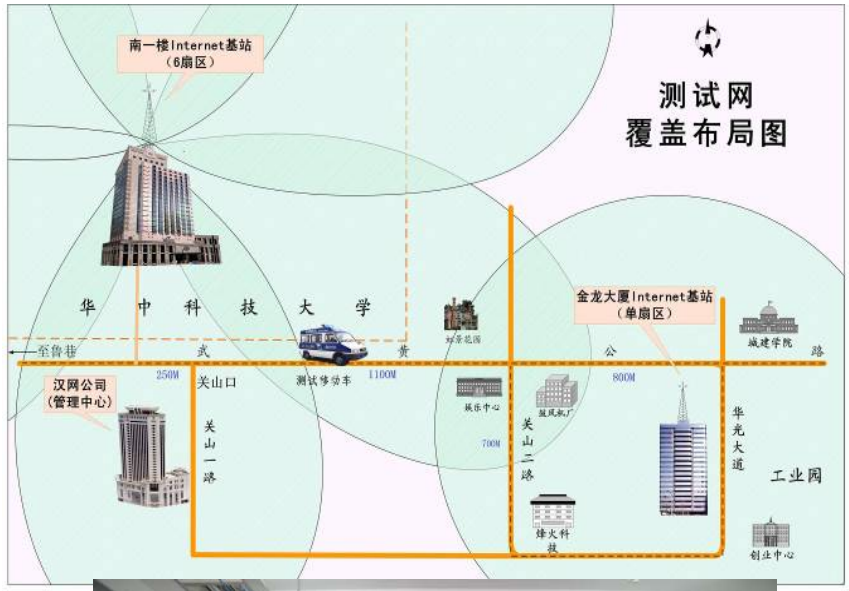
United Laboratory & Research Center

- Texas Instruments DSP lab.
- Intel embedded systems Lab and research center
- Agilent virtual instruments Lab.
- HUST-China Cache research center

Research Interests

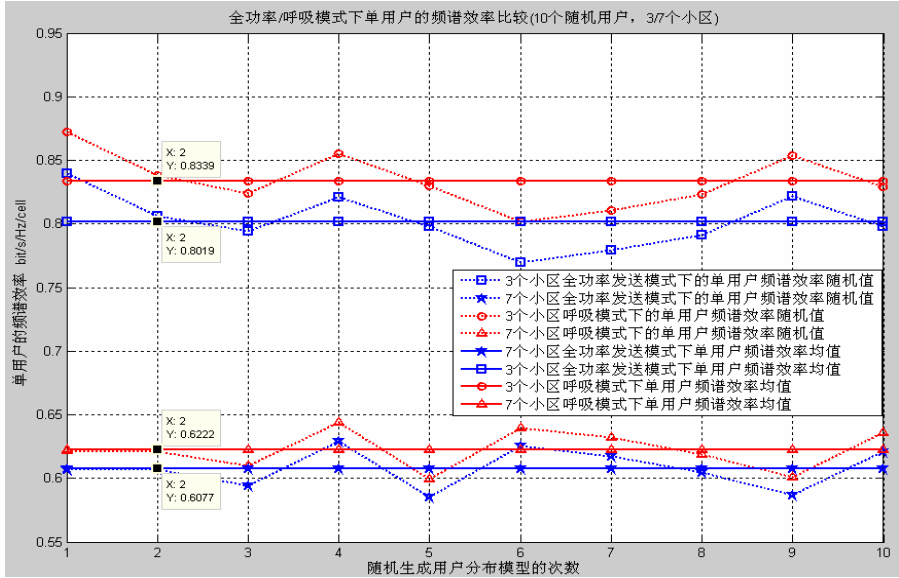
Broadband wireless communication

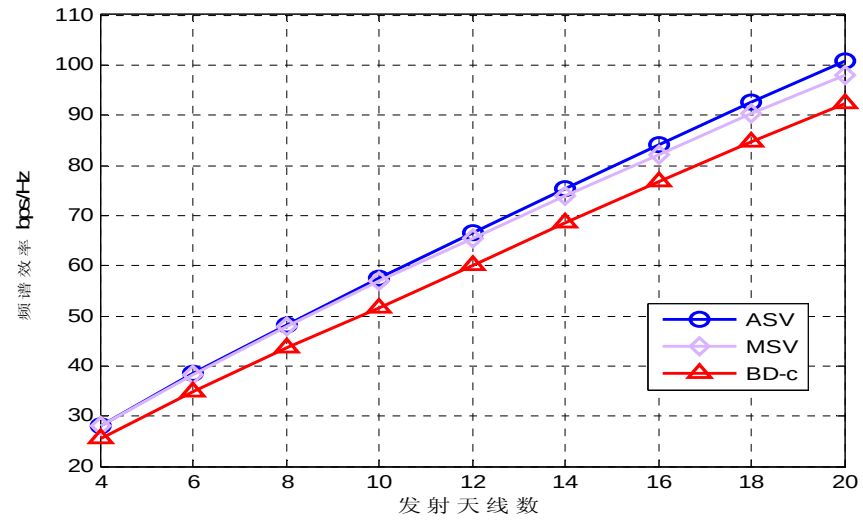
- The next generation Broadband wireless Mobil Communication
- Modern network communication technology
- Multimedia communication
- PDMA and B3G technology



4G mobile communication

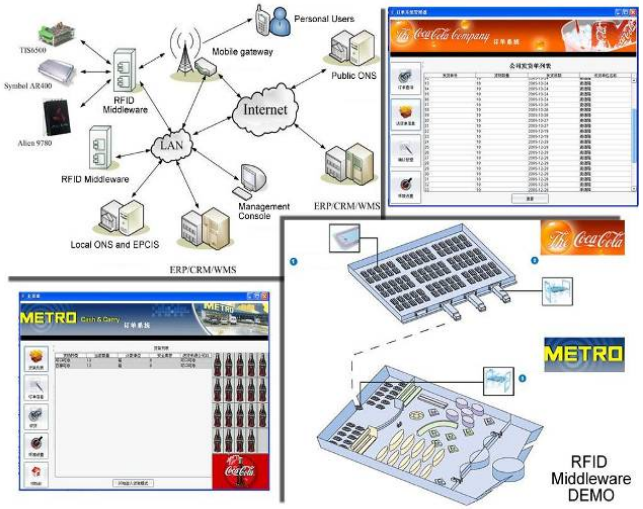
- Interference-coordination in MIMO communications
- Capacity analysis in the multi-cells MIMO communications
- Traffic balance in multi-cells based on cooperation communication
- User scheduling in multi-cells MIMO communications





Smart Internet and E-Service

- Key technology in electronic business
- Key technology in modern e-learning
- Digital rights management
- Intelligent building and digital city

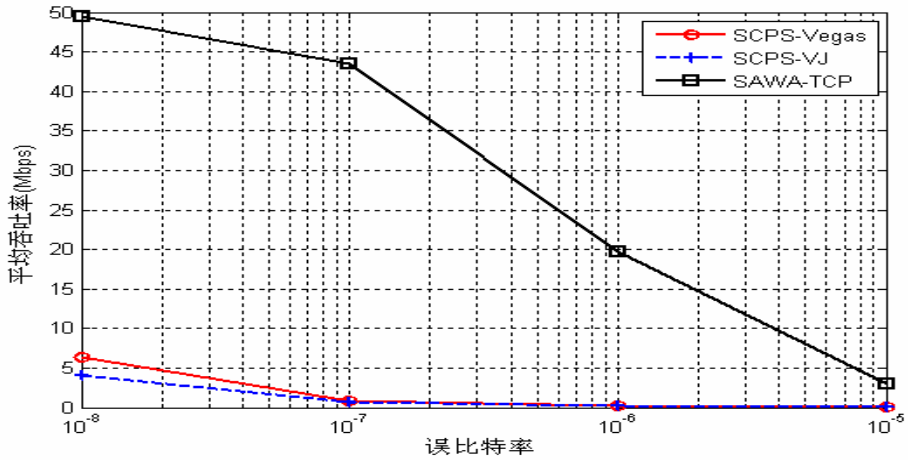


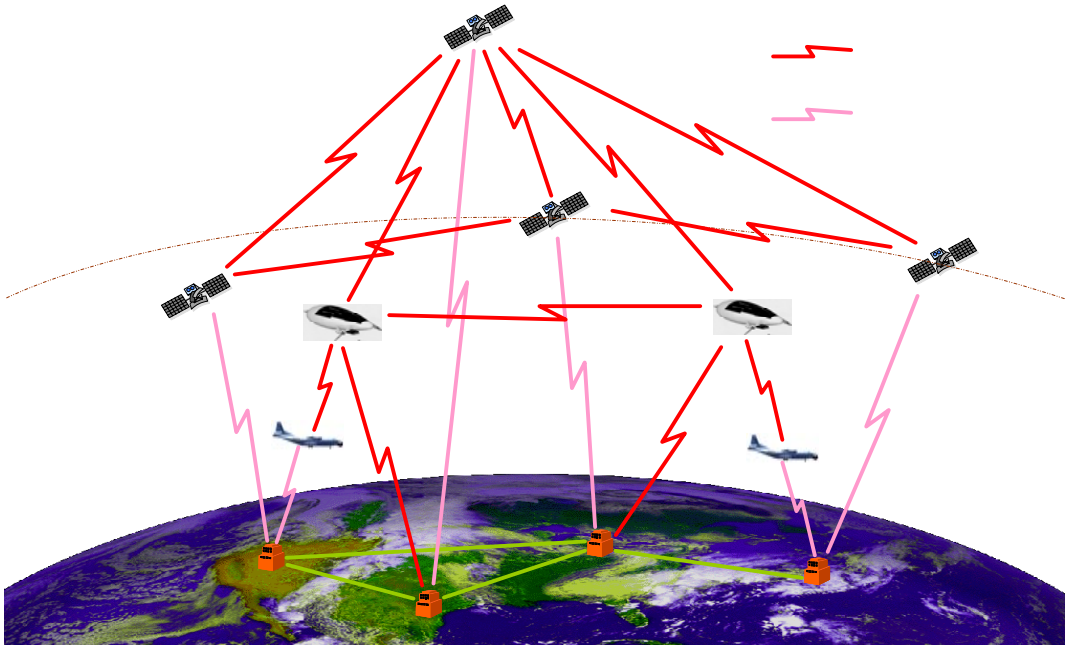
Electromagnetic Field and Microwave Techniques

- RF & Microwave Circuits and Systems
- Antenna and Antenna Array
- Electromagnetic Numerical Computation
- Electromagnetic Compatibility
- Microwave Radiation Measurement

Space and Sky information network

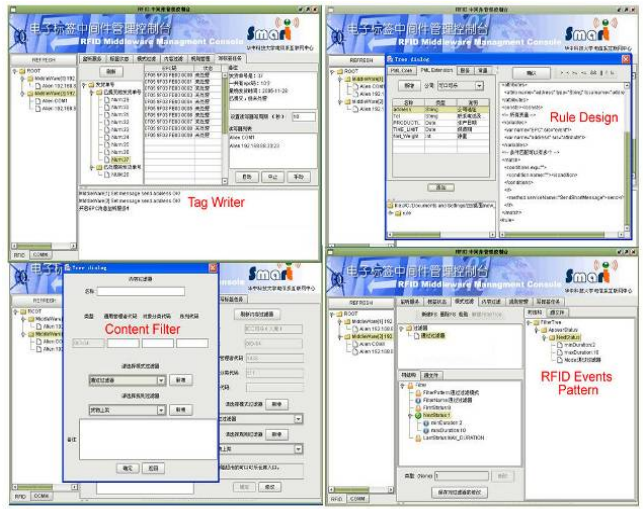
- Architecture of space and sky networks
- TCP enhancement in space networks
- Routing protocol in space networks
- Access control in heterogeneous space networks





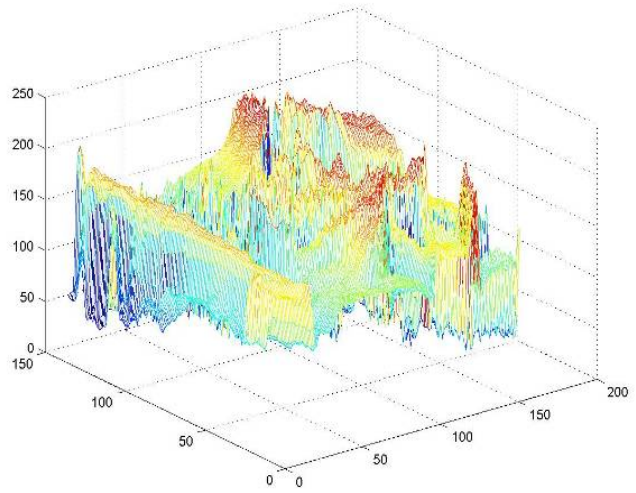
Information and network security

- Network and Information security technology
- Signal detection, identification and intelligentization
- Laser detection and laser communication



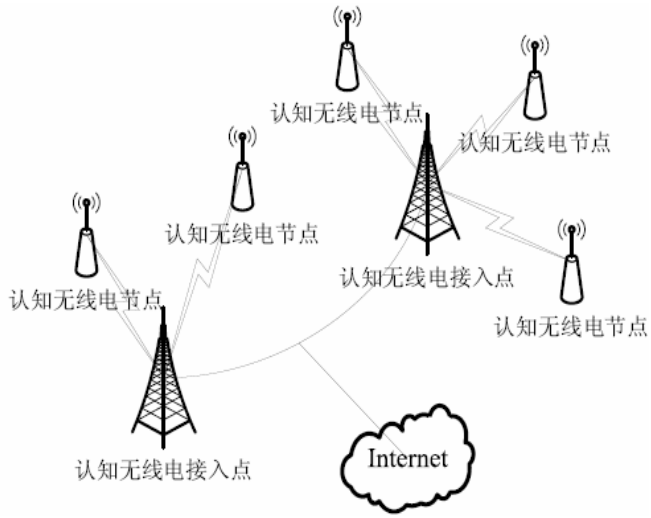
Intelligent image processing

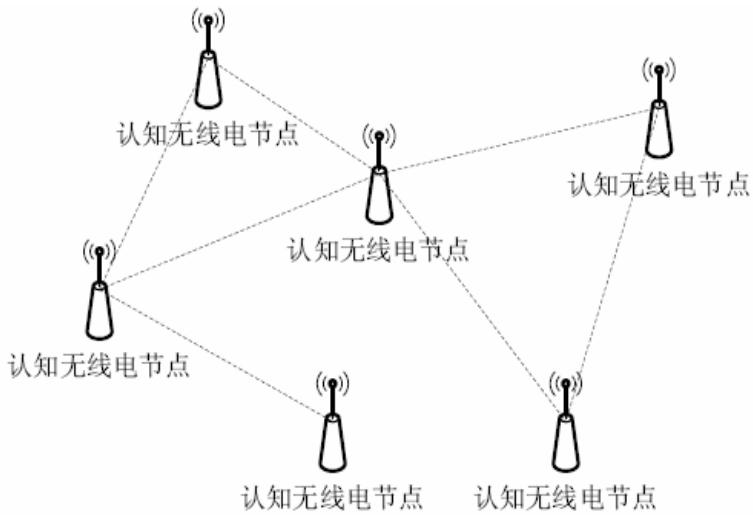
- Digital video/audio compression, processing and transmission
- Computer graphics and image processing and artificial intelligence



Cognitive Radio & Sensor Network

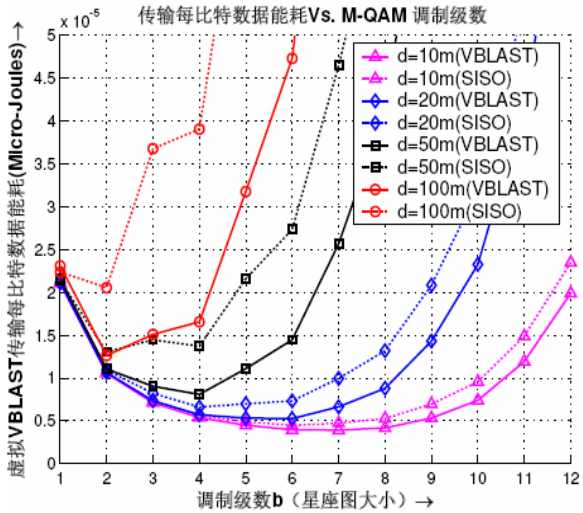
- The multi-hop cognitive radio networks
  - Spectrum management and scheduling at nodes
  - On-demand routing in cognitive radio networks
  - Load sharing in cognitive radio networks

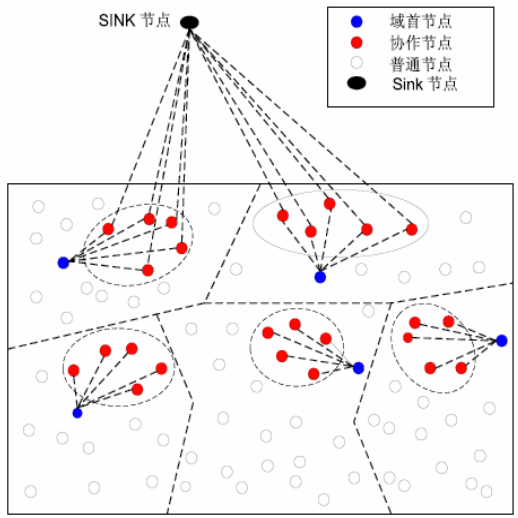




Wireless Sensor Network

- Localization for WSN
- Self-Organizing Management Technology for WSN
- The application of Virtual MIMO technique to wireless sensor network
- Zigbee and its applications





International Conference in EI

- The first international conference on space information technology (ICSIT), November 2005, Wuhan, China
- The second international conference on space information technology (ICSIT), November 10-11 2007, Wuhan, China

Fund and Int'l Cooperation Program

intel

MOTOROLA

TEXAS INSTRUMENTS

CERN

HTRDP 863

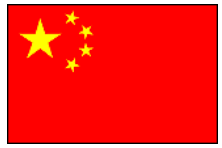
NTT DoCoMo

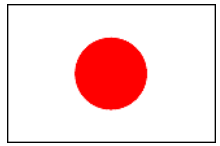
SAMSUNG

HUAWEI

1986

ZTE中兴





Thank you!