



MOBIUS CONSULTING

Wireless and Mobile Technologies



Overview

- Management technology strategic consulting services
- Team of industry and academic experts
 - Wireless and mobile technologies (RFID/ZigBee/WiFi/LTE/WiMAX)
 - Founded (2004) and led by Dr. Jacob Sharony, a 25+ years veteran in wireless networking, mobile computing, and information technology
- Clients
 - Service providers/operators
 - Systems integrators
 - Equipment vendors
 - Enterprises in various vertical markets

Areas of Expertise

- 4G/LTE/WiMAX
- WiFi – 802.11b/g/a/n/ac
- Small-cells and spectrum management
- MIMO and smart antennas
- VoIP/Video streaming over WLAN
- Data capture technologies
- Enterprise Mobility
- ZigBee – 802.15.4
- RFID and Wireless Sensor Networks
- RTLS – location tracking
- QoS/Security
- Mesh (ad hoc) and tactical networks
- Mobile applications and services

Services

- Technology management and strategic consulting
- System analysis, modeling and simulations
- Network architecture design
- Algorithms & prototype development
- System integration
- Research / position / white papers
- Product evaluation / competitive analysis
- Education and training
- Project management
- Expert witness

Select Projects

- Small-cell LTE-WiFi heterogeneous networks for enhanced capacity & coverage
- Wireless data collection for field applications using ZigBee/WiFi/WiMAX
- Asset and specimen tracking in healthcare, using RFID and WiFi
- Lab automation using ZigBee, RFID and WiFi technologies
- Multi-radio architecture for wireless mesh network
- Comparative study of 4G wireless technologies (LTE, WiMAX)
- Synchronization of mobile-WiMAX base stations
- VoWLAN capacity and admission control
- Bandwidth management in WLAN' s
- Reliable multicast wireless video streaming
- Interactive multimedia mobile applications
- Mobile device security and biometrics
- Mobility effects on WLAN' s using MIMO technology
- System issues with MIMO LAN' s - Roaming
- Energy efficient mobile systems
- Mesh network architectures
- Improving RFID reading reliability using MIMO
- Sensor networks for security

Dr. Jacob Sharony

Founder and Principal Consultant



- Ph.D. EE, Columbia ('93), MBA, Tel-Aviv University ('89)
- Visionary, innovator with strong analytical and systems skills
- Over 25 years experience in diverse technology disciplines
- Adjunct Professor EE, Columbia University
- 2006-2010 Director, Center of Excellence in Wireless and IT, Stony Brook University
- 1997-2005: Motorola – Sr. Director R&D and Technology Strategy
- Past: BAE Systems, NEC Research Institute, IBM Research, Captain in Israeli Air Force
- 40+ US patents issued or pending
- Numerous published journal/conference papers

Clients

- Telecom operators and service providers
- System integrators
- Equipment vendors
- Enterprises in various verticals (healthcare, energy, transportation,...)

