

# James T. Geier

## CONTACT INFORMATION

**Name:** James T. Geier

**Title:** Principal Consultant

**Company:** Wireless-Nets, Ltd.

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## PROFILE

James Geier has 30 years experience in the communications industry designing, analyzing and implementing data and voice communications systems, wireless networks, and mobile devices. James is the author of over a dozen books on mobile and wireless topics, such as including *Designing and Deploying 802.11 Wireless Networks* (Cisco Press), *Implementing 802.1X Security Solutions* (Wiley), *Wireless Networking Handbook* (New Riders) and *Network Re-engineering* (McGraw-Hill). He has been an active participant within IEEE standards organizations, such as the IEEE 802.11 Working Group and the Wi-Fi Alliance. He has served as Chairman of the IEEE Computer Society, Dayton Section, and various conferences. He has provided expert witness services to dozens of companies involved in patent litigation and IPRs.

## PROFESSIONAL EXPERIENCE

### **Principal Consultant and Founder – Wireless-Nets, Ltd. (Apr 2000 - present)**

- Designs mobile devices and implements corresponding software / firmware.
- Designs and integrates Wi-Fi, Bluetooth cellular, and Ethernet transceivers into mobile devices, such as smart phones, hospital patient monitors, cable T.V. boxes, and bar code scanners.
- Designs large-scale wireless networks for hospitals, airports, and manufacturing facilities for supporting voice and data applications.

### **Product Engineer / Manager - Monarch Marking Systems (Aug 1996 – Mar 2000)**

- Designed and implemented RF radios for Monarch's bar code scanners and printers.
- Integrated Ethernet transceivers into tabletop printers.
- Designed and implemented wireless middleware software for improving performance between mobile wireless devices and application servers.
- Designed and implemented wireless network infrastructures for wireless bar code scanners and portable printers used in retail and manufacturing applications.

### **Senior Systems Engineer - TASC, Inc. (Mar 1994 to Jul 1996)**

- Designed and implemented an enterprise-wide Ethernet / IEEE 802.3 and wireless network for Dayton Power and Light to support the migration from mainframe to client/server systems.
- Designed an information system architecture that supports internal and external communications for the U.S. Navy's NSSN attack submarine.
- Analyzed requirements for hardware, software, and support of the Joint Logistics Systems Center (JLSC) Materiel Management Standard System (MMSS) for the combined U.S. militaries.

### **Senior Systems Engineer - Adroit Systems, Inc. (Aug 1992 to Feb 1994)**

- Researched and analyzed emerging wireless network technologies as part of the Department of Defense Airborne Reconnaissance Data Link Architecture (ARDA) study, supporting communications for airborne systems.
- Designed a software tool that aids network engineers in planning, upgrading and maintaining shipboard computer networks - based on a Small Business Innovative Research (SBIR) government grant obtained from the U.S. Navy.

**Systems Design Engineer - Information Systems Center, Captain U.S. Air Force (Sep 1990 – Jun 1992)**

- Evaluated the effectiveness of wireless LAN technology for use in mobile and portable military environments.
- Represented the Air Force as part of the IEEE 802.11 Wireless LAN standards development.
- Designed and implemented large-scale Ethernet / IEEE 802.3 LANs and WANs for various government organizations.

**Systems Test Engineer - AFCC Operational Test and Evaluation Center, Lieutenant U.S. Air Force (Sep 1986 - May 1989)**

- Performed analog, digital, and protocol tests on various government wireless computer networks.
- Developed testing approaches and methods.

**Communications Systems Engineer - 75th TCF, U.S. Air Force (Dec 1977 - Jun 1983)**

- Performed acceptance testing of newly designed radar systems.
- Maintained automatic tracking radar systems in support of tactical Air Force operations worldwide.

## **EDUCATION**

**M.S., Electrical Engineering**, *Air Force Institute of Technology (1990)* – thesis involved designing and implementing a wireless mesh network for the U.S. Department of Defense.

**B.S., Electrical Engineering**, *California State University (1985)*.

**M.B.A.**, *University of Phoenix (2001)*.

## **MILITARY EXPERIENCE**

U.S. Air Force, Dec 1977 – Jun 1992, Commissioned Officer.

## **BOOK PUBLICATIONS**

- *Designing and Deploying 802.11 Wireless LANs (2<sup>nd</sup> Edition)*, Cisco Press, 2015.
- *Designing and Deploying 802.11n Wireless LANs*, Cisco Press, 2010.
- *Implementing 802.1x Security Solutions*, Wiley, 2008.
- *Deploying Voice over Wireless LANs*, Cisco Press, 2007.
- *Computer Security*, Wiley, 2007.
- *Computer Transfer and Backup*, Wiley, 2007.
- *CCIE Routing and Switching – Official Exam Certification Guide, 2nd Edition*, Cisco Press, 2006.
- *Wireless Networks – 5-minute Fixes*, Wiley, 2006.
- *PCs – 5-minute Fixes*, Wiley, 2006.
- *Wireless Networks – First Step*, Cisco Press, 2005 (translated to Chinese, French, Hungarian, Italian, Korean, Polish, Portuguese, and Romanian).
- *Certified Wireless Analysis Professional - Official Study Guide*, McGraw-Hill, 2004.
- *Wireless LANs, 2nd Edition*, SAMs, 2001.
- *Wireless LANs*, Macmillan Technical Publishing, 1999.
- *Wireless Networking Handbook*, Macmillan (New Riders) Publishing, 1996.
- *Network Re-Engineering*, McGraw-Hill, 1996.

## **INDUSTRY AFFILIATIONS**

### **Chairman, IEEE Computer Society - Dayton Section:**

- Managed the 900-member organization and established a continuing education program

### **Chairman, IEEE International Conference on Wireless LAN Implementation:**

- Managed all aspects of the conference from 5/91 to 12/92.

### **Member, Wi-Fi Alliance**

- Voting member of the Wireless ISP for Roaming (WISPr) committee.

### **IEEE 802.11 Wireless LAN Working Group**

- Represented interests of the Department of Defense for dealing with applications and frequency allocations.

## **TEACHING EXPERIENCE**

### **U.S. Naval Post Graduate School**

- Developed and regularly instructed a course on wireless network design and security to students and faculty.

### **Wright State University**

- Periodically instructed graduate courses on computer communications.

### **USAF Test and Evaluation School**

- Developed and instructed a 240 hour training course on wireless system test and evaluation.

### **Conferences**

- Regularly gives presentations at international conferences, including Supercomm (Asia), Scantech (Germany), and IBC (England).

### **Infocomm Solutions**

- Developed and instructed workshops in India, Singapore and Malaysia on wireless network implementation.

### **Technology Training Corporation (TTC)**

- Developed and instructed international training courses in Mexico and South America on wireless networking and network re-engineering.

### **Educational Services Institute**

- Developed and instructed courses on software project management, software testing, system integration and network re-engineering as part of the Project Management Institute (PMI) Project Management Professional (PMP) certification program.

### **Onsite Training**

- Regularly instructs workshops on wireless network design and deployment for product developers, system integrators, hospitals, and enterprises worldwide.

## **TESTIFYING EXPERIENCE**

Cases where James Geier has testified at depositions and trials:

### **Emerson Electric Co.**

Law firm: Ropes & Gray

Expert on behalf of Emerson Electric Co. in relation to an Inter Partes Review (IPR) with the USPTO Patent Trial and Appeal Board during 2016-17. Analyzed prior art; wrote declarations regarding optimum route determination over wireless networks; testified at deposition.

### **Emerson Electric Co.**

Law firm: Ropes & Gray

Expert on behalf of Emerson Electric Co. in relation a Covered Business Method Patent Review (CBMPR) with the USPTO Patent Trial and Appeal Board during 2016-17. Analyzed prior art; wrote declarations regarding systems for communicating information; testified at deposition.

### **Chrimar v. Aerohive**

Law firm: Wilson, Sonsini, Goodrich & Rosati

Expert on behalf of the defendant (Aerohive) during 2016-17. Analyzed case documents regarding power-over-Ethernet technologies; wrote an expert non-infringement report; testified at deposition; testified at jury trial (District Court - Eastern District of Texas, Judge Gilstrap).

### **Intellectual Ventures v. AT&T**

Law firm: Dechert

Expert on behalf of the plaintiff (Intellectual Ventures) during 2014-17. Analyzed case documents regarding IEEE 802.11 encryption and quality of service (QoS) technologies; wrote expert infringement and validity reports; testified at deposition.

### **Chrimar v. AMX**

Law firm: McDermott, Will & Emery

Expert on behalf of the defendant (AMX) during 2016. Analyzed case documents regarding power-over-Ethernet technologies; wrote an expert non-infringement report and invalidity report; testified at deposition.

### **Universal Remote**

Law firm: Ostrolenk Faber

Expert on behalf of Universal Remote in relation to an Inter Partes Review (IPR) with the USPTO Patent Trial and Appeal Board filed in 2015. Analyzed prior art; wrote a report regarding TV remote control technologies; testified at deposition.

### **Skyhook v. Google**

Law firm: Tensegrity

Expert on behalf of the plaintiff (Skyhook) during 2012-15. Analyzed case documents and software regarding Wi-Fi-based location systems; wrote an expert infringement report; testified at deposition.

**MTEL v. UPS**

Law firm: Reed & Scardino

Expert on behalf of the plaintiff (MTEL) in 2014. Analyzed prior art and case documents regarding express mail delivery notifications; wrote an expert validity report; testified at deposition.

**Motorola v. Microsoft**

Law firm: Sidley Austin

Expert on behalf of the defendant (Microsoft) in 2012. Analyzed prior art and case documents regarding data addressing and data update mechanisms; wrote expert reports on invalidity and indirect non-infringement; testified at deposition; testified at trial (International Trade Commission (ITC), Judge Shaw).

**Motorola v. Microsoft**

Law firm: Sidley Austin

Expert on behalf of the defendant (Microsoft) in 2011. Analyzed prior art and case documents regarding security / encryption protocols; analyzed product firmware; wrote expert reports based on invalidity and non-infringement; testified at deposition; testified at trial (International Trade Commission (ITC), Judge Shaw)

**Motorola v. Microsoft**

Law firm: Sidley Austin

Expert on behalf of the defendant (Microsoft) in 2011. Analyzed prior art and case documents regarding application registry and data update technologies; wrote expert reports based on invalidity and non-infringement analysis; testified at deposition.

**Autocell v. Cisco Systems**

Law Firm: Hanify & King

Expert on behalf of the plaintiff (Autocell) in 2010. Analyzed patents, prior art and case documents regarding transmit power control of 802.11 radios and access points; performed lab and field testing of alleged infringing products; analyzed product firmware; wrote expert reports based on infringement and validity analysis; testified at deposition.

**Truckstop.Net v. Sprint Communications**

Law Firm: Holland & Hart

Expert on behalf of the plaintiff (Truckstop.Net) in 2004. Reviewed case documents; performed testing of 802.11 signal coverage and performance at truck stops located throughout the U.S.; wrote expert reports based on test results and review of case documents; deposed on each report.