

# **James T. Geier**

## **CONTACT INFORMATION**

**Name:** James T. Geier

**Title:** Principal Consultant

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## **PROFILE**

James Geier is an independent consultant and author with 30 years experience in the communications industry designing, analyzing and implementing 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 802.11n 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 served as a testifying expert for patent litigation cases focusing on technologies dealing with mobile devices, cellular systems, wireless network protocols, network security mechanisms, location systems, and application data management protocols.

## **PROFESSIONAL EXPERIENCE**

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

- Designed mobile devices, such as smart phones, and implemented corresponding software / firmware for various startup firms.
- Designed and integrated 802.11 and 802.15 wireless radios into mobile devices, such as smart phones, hospital patient monitors, cable T.V. boxes, bar code scanners and robots.
- Designed large-scale wireless LAN infrastructures and Wi-Fi hotspots for deployment in hospitals, airports, industrial facilities and municipalities.
- Analyzed wireless communications protocols as the basis for troubleshooting mobile system / network problems.

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

- Designed and implemented RF radios for Monarch's bar code scanners and 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 wired 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 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 802.11n 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. Navel 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.

## **LITIGATION RELATED EXPERIENCE**

### **WiLAN v. Blackberry**

Law firm: McDermott Will & Emery

Consulted on behalf of the defendant (Blackberry) in 2013. Analyzed prior art as part of invalidity analysis involving messaging, frequency hopping, and forward error correction.

### **MLR v. Lenovo**

Law firm: Akin Gump

Consulted on behalf of the defendant (Lenovo) in 2013. Analyzed prior art as part of invalidity analysis involving multi-modal radio technologies.

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

Law firm: Dechert

Consulted on behalf of the plaintiff (Intellectual Ventures) in 2013. Analyzed case documents regarding infringement of products and systems involving message fragmentation, message transmission protection, message delivery priority, and security protocols.

### **Skyhook vs. Google**

Law firm: Tensegrity Law Group

Consulted on behalf of the plaintiff (Skyhook) in 2012. Analyzed software and case documents regarding infringement of products and systems implementing location technologies.

### **SIPCO v. Eaton Corporation**

Law firm: Rader, Fishman & Grauer

Consulted on behalf of the dependent (Eaton Corporation) in 2012. Analyzed prior art and developed applicable patent invalidity claims charts regarding sensor network systems. Case settled prior to trial.

### **Motorola vs. Microsoft**

Law firm: Sidley Austin

Disclosed as testifying expert on behalf of the defendant (Microsoft) in 2012. Analyzed prior art and case documents regarding data addressing and update mechanisms; wrote expert reports based on invalidity and indirect non-infringement analysis; deposed on each report; testified at the International Trade Commission (ITC) in December 2012. Case settled.

### **Motorola vs. Microsoft**

Law firm: Sidley Austin

Disclosed as testifying 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 analysis; deposed on each report; testified at the International Trade Commission (ITC) in January 2012. Case settled.

**Motorola vs. Microsoft**

Law firm: Sidley Austin

Disclosed as testifying 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; deposed on each report. Trial schedule pending.

**Autocell vs. Cisco Systems**

Law Firm: Hanify & King

Disclosed as testifying 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; deposed on each report; Case settled prior to trial.

**Motorola vs. Research In Motion**

Law firm: Sidley Austin

Disclosed as testifying expert on behalf of the defendant (Research in Motion) in 2010. Analyzed patents, prior art and case documents regarding mobile application data accessibility. Case settled prior to trial.

**Truckstop.Net vs. Sprint Communications**

Law Firm: Holland & Hart

Disclosed as testifying 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; Case settled prior to trial.