

**Mohammad Hassan Partovi**

10301 Oaklyn Drive

Potomac, MD 20854

(703) 856-0550 (mobile)

[hassan\\_partovi@hotmail.com](mailto:hassan_partovi@hotmail.com)

**EDUCATION**

BSE, MSE, and Ph.D., Industrial and Operations Engineering, University of Michigan

**BACKGROUND/EXPERIENCE SUMMARY (Reverse Chronological)**

- 4G LTE Lab and Field Testing Program/Project Management Activities
- 4G LTE/eHRPD-related Test Leadership for ALU Core Equipment (4G Serving and PD Gateways)
- Compilation of Performance Measurements/KPIs and Failure Alarms for LTE PD Gateways
- LTE/eHRPD Network Design & Development (for Datalink & Static IP Addressing)
- Strategic Service/Network Roadmap & Evolution Analysis for Sprint's Datalink and Static IP services for Enterprise Customers
- WiMAX ASN/Core Architecture and ASNGW Technology Development
- NextGen Wireless Technologies, Architectures and Vendors Evaluation: Flarion, WiMAX, LTE
- Next Generation Wireless Network Standards participation, 3GPP/3GPP2
- Fixed and Mobil IP Network Architecture analysis & design (including self-healing networks)
- RFI/RFP planning, coordination, technical leadership, and participation
- Wireless technology and market trial planning and participation
- Early Broadband technology and service architectures (*IP, ATM, Frame Relay, etc.*)
- Emerging multi-service network design, planning, and Analysis
- Broadband and transport network/service management planning (architecture, processes, systems)
- ATM Network Engineering, Planning, and Deployment (Teleglobe USA)
- Basic Generic requirements and standards involvement (Network surveillance, IP & ATM network & service management in ANSI-T1, 3GPP2)

**EXPERIENCE DETAILS**

**06/11-12/17. Sprint Nextel, Senior Telecomm Engineer, 4G Network Design and Development**

- Test Lead for all Nokia-ALU LTE S and P-Gateway new releases, new features, bug fixes, etc.
- 4G LTE Network Design & Development for Value-Added Services (for Enterprise Customers)
- Sprint Datalink P-Gateway Requirements formulation and Network Design Support (to add support for LTE and eHRPD)
- Sprint Static IP Addressing Requirements and Network Design Support
- Compilation of New (4G LTE related) Failure Alarm Notifications and Performance Measurements associated with the Cisco PD-Gateway (ASR-5000) for OA&M Process and System Development Purposes
- Strategic Service/Network Roadmap and Evolution Analysis for Data Link and Static IP
- Participation in 4G LTE Device/Service Testing for Wholesale (e.g., throughput, throttling)
- Performing Project/Program Management Activities for the team

**01/09-04/11 Clearwire, Manager, WiMAX Core & ASNGW Development (multiple vendors)**

- WiMAX 3<sup>rd</sup> Party ASNGW RFP Team Leadership (requirements, drafting, response evaluations)
- WiMAX ASN Gateway Feature Requirements formulation, Development Roadmap Coordination
- WiMAX Vendor ASNGW Feature Validation (High-Level Test) Requirements formulation

- WiMAX Multi-vendor Interoperability Specification, and development/testing coordination
- Wholesale/MVNO Support – Technology Development for Sprint Session Continuity

**7/06-12/08 Sprint Nextel (XOHM Division), Manager, WiMAX Core Network Development**

- WiMAX Core Architecture Development/Design, ASNGW & Core Requirements, Feature Roadmap Coordination, Vendor ASN Feature Validation Testing Requirements, R4/R6 Multi-Vendor Interoperability Specification (initiation of the project among multiple vendors in parallel to standards process), and Roaming Architecture Development

**9/05-6/06. Sprint-Nextel, Manager, Emerging Technologies – Core Research**

- Next Generation Wireless Technology assessment for deployment in the 2.5 GHz spectrum [Core Network Assessment Team Leader in the 4G RFI process; continued involvement in the RFP phase]
- Wireless/Telecomm Industry & Academic Research (wireless mobile ad hoc and mesh networks)

**5/00-8/05. Nextel Communications, Sr. Manager (later, Director), Packet Core Architecture**

- NextGen (4G) Technology/Network architecture evaluation & vendor selection activities (technical leadership in core network RFI's OA&M Section)
- NextGen Core RFI/RFP for pre-4G All-IP RAN Technologies: Participation in planning, requirements, & vendor interactions, including technical leadership of the OA&M Section
- Core Network Analysis and Evaluation for emerging 4G Wireless Technologies (IP Wireless, and Flarion flash-OFDM), including trial planning and support
- 3G Evaluation Leadership for Push-To-Talk Vendor Proposals (Motorola, Qualcomm, etc.)
- 3G Wireless Architecture Research/Analysis, including 3GPP2 TSG-C wireless standards meetings
- CDMA2000 Trial, Early RFI/RFP Participation: planning, requirements, vendor interactions (Core Network domain leadership role)

**06/98-4/00. Teleglobe Communications, Mgr, ATM Network Planning & Capacity Mgmt.**

- ATM Network capacity requirements analysis and assignment, topology growth/migration planning
- Technology assessment and evolution planning (multiservice ATM network architecture planning, technology analysis, vendor interactions)

**06/95-05/98 AT&T Laboratories, Senior Technical Staff Member (Data Services):**

- Operations planning leadership role for a multiservice ATM/SONET infrastructure network; participation in planning the multiservice ATM network itself
- Leadership role in specification and prioritization of ATM switch operations functions to support AT&T's multiservice network operations

**09/84-05/95 Bell Communications Research (Bellcore), Member of Technical Staff:**

- Formulation of functions and supporting algorithms for a Broadband Network Management System
- Formulation & specification of generic operations functions for Broadband switching systems
- Leadership role in a Bellcore team to identify and resolve potential operations issues in a multiservice Broadband environment
- Participation in telecom standards committees (T1M1, ITU-T); initial editor of an ANSI T1M1 draft standard on digital transmission surveillance (ANSI T1.231)

**AWARDS/HONORS**

- Clearwire's "Clearly the Best" Annual Recognition Award in the Spring of 2010, which included a 4-day trip for two to a Hawaiian resort in Maui

- Nextel's Special Recognition Award for Flarion Trial participation
- Nextel's CTO Award in 1H 2003 for the RFI Evaluation Report
- Nextel's Special Recognition Award for leadership of the OA&M drafting/evaluation team
- Number of other Monetary recognition awards at Sprint Nextel, XOHM, and Clearwire
- Four Sprint Nextel Patent Awards

### **SPECIAL SKILLS**

- Excellent verbal and written communications skills
- Expertise in a variety of computer programming languages, operating systems, and applications

### **PUBLICATIONS**

- Partovi, M. H., *A Study of Degeneracy in the Simplex Algorithm for Linear Programming and Network Flow Problems*, Ph.D. Dissertation, Department of Industrial and Operations Engineering, The University of Michigan, Ann Arbor, Michigan, December 1984.
- Partovi, M. H., *A Maintenance Decision Support System for Digital Transmission Networks*, Presented in ORSA/TIMS Conference, April 1987.
- Partovi, M. H., *Complexity of Identifying a Feasible Basic Vector Involving Specific Variables in a Transportation Problem*, The Arabian Journal of Science and Engineering, Vol. 16, No. 2B, April 1991 (pp. 347-348).
- Gharavi, H. and Partovi, M. H., *Video Coding and Distribution over ATM for Multipoint Teleconferencing*, IEEE GLOBECOM PROCEEDINGS, December 1993.
- Gharavi, H. and Partovi, M. H., *A Universal Video Coding and Distribution Architecture of Emerging Broadband Digital Networks*, IEEE/ACM Transactions on Networking.
- Partovi, M. H., *Performance Monitoring and its Role in Managing the Emerging Multiservice Broadband Networks*, Proceedings of the 3<sup>rd</sup> Annual IAA Conference: "Computers and Communications, September 1998,
- Also, a number of conference papers/presentations on surveillance-based maintenance, performance monitoring, service quality assurance, etc.