

**ASWATH RAO**  
82 Banyan Blvd.  
Holmdel, NJ 07733  
Phone: (732) 275-1267  
Email: aswath66@yahoo.com

---

- Objective** Utilize wide experience in the technology industry to develop new products in telecommunications field or in the area of web services with special emphasis on user experience.
- Significant Item** Currently spearheading a small scale startup that is developing a Unified Communications and Collaboration" suite as a web application. It is targeted at the SMB market segment. I am the creative director of this effort and currently funding this project as well. This project uses many new technologies and has novel approaches to different technical problems. Currently I am partnering with an organization that is trying to market it. (www.enthinnai.com)
- Summary** Systems engineer and business development expert with almost 30 years of progressive experience. Capable and willing to learn new subject areas. Expert in Network Services and Protocol Engineering with special emphasis on Internet and data communications technologies. Possessing strong technical knowledge supported by a keen business outlook and an eye towards organizational processes.
- Technical Skills** Data communications and Signaling protocols (including VoIP, web services, Unified Messaging, IEEE LANs, TCP/IP and ISDN/BISDN), Project Management, Microsoft Windows programming using Visual Basic and ToolBook, and Web programming using JavaScript.
- Executive level understanding of web technologies, XML and Java.
- Work Experience** January 2008 to January 2010: Senior Systems Engineer, uReach Technologies, Holmdel, NJ  
Responsible for developing forward looking service concepts and integrating web services into the current platform. I also developed marketing proposals in an attempt to expand on the customer base.
- December 2003 to December 2007: Senior Director, ZTE USA, Iselin, NJ  
Responsible for Technical Marketing and Business Development of CPE products. Major achievements include introducing ZTE's Session Border Controller product to the Western market and in developing and being the Company Angel for many of the ground breaking features in Home Gateway product line.
- July 2000 to September 2002: Offer and Marketing, INS, Lucent Technologies  
As a member of the CTO Team, INS, review INS product portfolio from marketing strategy perspective and provide input to the Portfolio Review Board of senior executives.
- Member, Strategy Review Team. Generated a strategy to develop SIP based products with functional requirements on the Network elements. This directly lead to the development plan for a new capability to one of the products and facilitated new service offerings for Lucent Softswitch. Generated a QoS

strategy for IP network elements that is to be incorporated into Lucent strategy following a final review.

October 1998 to June 2000: elemedia, Lucent Technologies.

- Development manager for H.323 protocol stack and the Media server for IP communications network. Brought in to lead the team when there were developmental difficulties. Delivered two releases of the stack on time.
- Proposed a web technology that can serve data to multiple devices (PC, PDA, cell phone, POTS phone) from a single source of data. Developed the business plan, technology selection (XML based) and lead the development team.

July 1997 to September 1998: Motorola Inc.

- Developed and performed a trade study on a random access scheme for the Celestri® project (next generation satellite based system that will provide high bandwidth connectivity; superceded by Teledesic). A patent application has been submitted.
- Chief Engineer for a team that was chartered to evaluate the strategic business opportunities in the Internet market. The tasks involved developing technical specification, market analysis, and evaluation of potential business partners. Provided briefings directly to the President of the Sector (Jack Scanlon) on a monthly basis.

February 1994 to June 1997: Motorola Inc.

- Project Leader and Manager for Protocol Design Team. Defined the various protocols used in the Iridium® system. Worked with the development teams during the development and testing cycles. The protocols covered the Link, Network and Transport layers for call control and for information transfer as well as Network Management functions. Specific responsibilities included Requirements Specification, Contract Management, Personnel Management and Project Management. In one specific case, the specification allowed an optimal development in the space vehicle while salvaging an independent implementation in the ground station, thereby eliminating a potential six months delay in the deployment.
- Designed, developed and deployed a protocol analyzer for the protocols used in the system.
- Developed a business case and the architecture for high-speed data service for Iridium. Developed service architecture for delivering facsimile in the Iridium system utilizing the Unified Messaging mechanism.
- Member of the team charged with moving the organization to Level 3 from Level 1 of SE-CMM in one year. The required result was achieved in December 1997.

April 1993 to January 1994: AT&T Bell Laboratories

Member of Wireless Data Networking Services Team. Analysis of various wireless data networking protocols with a specific emphasis on Cellular Digital Packet Data (CDPD) and propose a network service.

December 1989 to March 1993: AT&T Bell Laboratories

Technical Lead for PRI Test Development Team. Development of tools to test the various interfaces (user-side and network-side) specified by AT&T Integrated Services Digital Network (ISDN) Primary Rate Interface, Enhanced Call Processing and TR 303 interface specified by Bellcore. Specific

responsibilities included Requirements Specification, User Interface development, Customer Support and Project Management. Streamlined the test plan and the user interface so that field technicians can use the test bed. This freed up Bell Labs engineers, who were doing the tests earlier. Developed a proposal to commercialize the test bed.

April 1986 to November 1989: AT&T Bell Laboratories

- Technical Lead for Broadband ISDN Product Development. Development of business case for customer premise equipment for Broadband ISDN, using OC-3c transport.
- Analysis and development of protocols suited for high-speed communications like Broadband ISDN.

August 1982 to March 1986: AT&T Bell Laboratories

- Member, ISDN Standards Team. Responsible for ISDN signaling protocol development. Participation in T1D1 and ITU (then CCITT) standards bodies. The work involved development of Q.931 and Frame Relay contributions.
- Development of AT&T ISDN Services and Switching requirements. Author of the section on Q.931 in AT&T Technical Reference TR 41459.
- Development of Stimulus vs. Functional protocols for ISDN terminals that anticipated much-heralded TAPI for Windows operating system. Development of supplementary services for ISDN and evaluation of feature interaction in Class 5 switches.
- Proposal to provide “dial-tone” service from Class 4 switches for direct connect customers (with AB-signaling and pre-ISDN)

**Career Progress**

October 1998: Technical Manager, Lucent Technologies, Holmdel, NJ.

February 1995: Member, Technical Staff (E13), SATCOM, Motorola Inc., Chandler, AZ.

August 1994: Manager, Protocol Design Team, SATCOM, Motorola Inc., Chandler, AZ.

February 1994: Technical Staff Engineer (E12), SATCOM, Motorola Inc., Chandler, AZ.

May 1988: Distinguished Member of Technical Staff, AT&T Bell Laboratories, Holmdel, NJ.

August 1982: Member of Technical Staff, AT&T Bell Laboratories, Holmdel, NJ.

Fall 1979 – Summer 1981: Faculty positions

**Extra-Curricular Projects**

January 2004 to present: Author, [Aswath Weblog](#)

(<http://www.mocaedu.com/mt>). This blog is widely read by people in the VoIP industry.

Twitter: @aswath

October 2002 to present: President, Moca Educational Products, Inc.

Founded an educational software publishing company. The company released in April 2003 its first product, a children’s math program that is unique from human factors point of view and as yet unmatched by commercial programs.

Developed a computer-aided training system for ISDN, Signaling System No. 7 and ASN.1.

**Publications**

Bharat T. Doshi, Dominik Eggenschwiler, Aswath Rao, Behrokh Samadi, Y. T.

Wang, and James Wolfson, "VoIP Network Architectures and QoS Strategy," in Bell Labs Technical Journal 7(4), 41–59, 2003.

V. Ramaswami and K. Aswath Rao, "Flexible Time Slot Assignment A Performance Study for the Integrated Services Digital Network," in Teletraffic Issues in a Advanced Information Society, M. Aklyama ed., Proc. 11th ITC Seminar, pp. 78-84, 1985.

**Patents** System and Method for Packet Data Communication, #6,078,577, Issued Jun. 20, 2000.

Three patent applications have been filed - one related to offering supplementary services in VoIP and two related to high-speed ATM switching platforms.

**Educational Qualifications** Ph. D., Probability and Statistics from Case Western Reserve University, Cleveland, OH, 1979.  
M. S., Operations Research from Case Western Reserve University, Cleveland, OH, 1980.  
M. Sc., Mathematics from Indian Institute of Technology, Bombay, India, 1973.