#### **Biography:**

Mahmoud Daneshmand is Professor of Business Intelligence & Analytics at Howe School of Technology Management, Stevens Institute of Technology. He has more than 35 years of teaching, research & publications, consultation, and industry & academia management experience including: Bell Laboratories, AT&T Shannon Labs–Research, University of California at Berkeley, University of Texas at Austin, Sharif University of Technology, University of Tehran, New York University, and Stevens Institute of Technology.

He has served as Distinguished Member of Technical Staff (DMTS) at Bell Labs as well as AT&T Shannon Labs-Research; Technology Leader at AT&T Labs; Assistant Chief Scientist of AT&T Labs; Founder and Executive Director of the AT&T Labs university collaborations program. He is an Industry Professor at Howe School of Technology Management and department of Computer Science, and Co-Founder of the Business Intelligence & Analytics MS program at Stevens Institute of Technology. He is an expert in Big Data Analytics, Internet of Things (IoT)/Sensor & RFID Data Streams Analytics, Data Mining Algorithms, Machine Learning, Probability & Stochastic Processes, and Statistics. He is experienced in Risk Management, Quality and Reliability of IP-Based Services and Applications.

He has published more than 96 Journal and conference papers; authored/co-authored three books; holds two patents (2009 and 2010).

He holds key leadership roles with IEEE Journals Publications as well as IEEE Major Conferences including: Co-Founder and Chair of Steering Committee of New IEEE Journal of Internet of Things; Guest Editor of several IEEE Journal Special Issues; Keynote Speaker of many IEEE as well as other International Conferences; Executive Committee of Globecom as well as ICC; Chair of Steering Committee of IEEE ISCC; and General Chair and Technical Chair of many IEEE conferences.

He has a PhD and MS in Statistics from the University of California, Berkeley, and MS and BS in Mathematics from the University of Tehran.

He is the founder of the Department of Statistics and co-founder of the School of Informatics and Management Sciences of the National University of Iran. He has served as Chairman of the Department of Statistics and Dean of the School of Informatics & Management Sciences of the National University.

Mahmoud is well recognized within the academia and industry. A partial list of his recent technical accomplishments include: Guest Editor, IEEE Sensors Journal SI on Internet of Things (to be published September 2013); Guest Editor of IEEE Communications Magazine (published in Feb 2011), Guest Editor of Journal of Networks and System Management (published September 2011); Keynote Speaker, The 2013 IEEE International Conference on Internet of Things (iThings2013), Beijing, China, August 20-23, 2013; Keynote Speaker, International Conference on Cyber-enabled distributed computing and Knowledge Discovery, 10-12, October 2013, Beijing, China; Keynote Speaker: ISITCE 2012 (South Korea), IEEE ISCC 2011 (Corfu), ICC 09 (Dresden), IEEE ISCC 2008 (Marrakesh), ICT 2008 (St. Petersburg), IMSEE 2000 (Tehran), and ICISTM 2008 (Dubai); Co-editor of three IEEE Proceedings on Computers and Communications with a total of more than 450 peer reviewed accepted technical papers (ISCC 2002, ISCC 2006, and ISCC 2010); innovated and led execution of more than 60 Bell Labs and AT&T Labs large-scale projects on computer and communications; served as analytics and statistics consultant in many research, business and operations projects; made extensive contributions to the Industry Standards and regulatory organizations including ITU, ANSI, and FCC (invented the well known standardized Networks Outage Index). He has chaired multiple international conferences including IEE 2003 (London), IEEE ISCC 2002 (Sicily), IEEE ISCC 2006 (Sardinia, Italy), WICON 2010 (Singapore), and IEEE

ISCC 2010 (Riccione, Italy), and Cyber Security (China 2011). Organized and served as **Keynote Chair and Panel Chair** of many IEEE conference in including: ICC 2007 (Glasgow, Scotland), ICC 2009 (Dresden, Germany), GLOBECOM 2009 (Hawaii, US), NOMS 2010 (Osaka, Japan), GLOBECOM 2010 (Miami, US), GLOBECOM 2011 (Houston), NOMS 2012 (Hawaii), INFOCOM 2012 (New Orleans), GLOBECOM 2012 (Anaheim), and GLOBECOM 2014 (Austin, TX); Held and chaired **AT&T Labs annual Academia-Industry** Joint Research Collaborations Symposiums (UC Symposiums 2005, 2006, 2007, 2008, 2009, and 2010).

He served as an **expert witness** in several legal industrial courts and litigations and established scientific validity of several Bell Labs studies; designed and taught many graduate and undergraduate courses in areas of Data Mining, Machine Learning, Artificial Intelligence, Sampling Techniques, Probability and Stochastic Processes, Risk Management, and Inferential Statistical Techniques; advised many master and PhD dissertations; led more than 200 Data Mining case studies of graduate students working with high technology corporations such as AT&T, Lucent, Verizon, and Merck. He served as a member of Advisory Board of Center for Networked Systems at the University California San Diego; Advisory Board of SATM (Stevens Alliance for Technology Management); Editorial Board of the JNSM (Journal of Network and Systems Management).

As professor of the Howe School of Technology Management he has developed and taught new graduate courses on emerging areas of "Risk Management", "Data Mining", and Data Streams Analytics. He has contributed to proposal and establishment of two new graduate programs at Stevens: Financial Engineering, and Business Intelligence & Analytics. He is co-founded a new MS program on Business Intelligence & Analytics.

As professor of the Department of Computer Science he teaches "Probability and Stochastic Processes" and "Data Mining & Knowledge Discovery", and advises graduate students projects and Masters and PhD thesis.

Prior to his position of DMTS, he has served as Technology Leader AT&T Labs, Technology Consultant AT&T Labs, Principal Technical Staff Member of the AT&T Labs, and a Distinguished Member of Technical Staff of the Bell Laboratories, Lucent Technologies.

He is the recipient of several distinguished awards from Bell Labs, AT&T Labs, Standards Committee T1, and IEEE.

### PROFILE

- **Big Data & Stream Data Analytics, IoT, Sensor & RFID Data Mining, Artificial Intelligence (AI), and Machine Learning (ML):** Expert in Big Data Analytics, AI, ML, and DM and Knowledge Discovery techniques and algorithms applied to Big Data, Web-Data, Internet and Communications traffic data, IoT, Sensor and RFID data Streams leading to efficient business and operations decisions,
- **Statistical Techniques:** from data acquisition (sampling, experimental design) to analysis and modeling for engineering applications and/or intelligence business and operations decisions,
- **Technology Leader:** leading teams of engineers, researchers, university professors and their PhD students to initiate, develop and execute technologically challenging, complex, and multidiscipline projects having direct impact on science and technology,
- Internet and Wireless QoS: quality of service and reliability of Internet and Wireless based services,
- **Expert Witness:** scientific evidence for claim substantiation / verification in legal proceedings and litigation,
- Teaching: graduate and under graduate courses, advising MS and Ph.D. thesis,

• **Management:** founded and served as Director of the AT&T Labs University Collaborations program, established a new academic department within a university, served as the chair of the department and dean of the school; established Center for Networked Systems (CNS) at UCSD, an industry - academia partnership conducting research on technologies and foundations for robust, secure, and open networked systems of this century, serves as member of the advisory board of the CNS.

### **EDUCATION**

Ph.D., Statistics, University of California, Berkeley,

M.S., Statistics, University of California, Berkeley,

M.S., & B.S., Mathematics, University of Tehran

## <u>Recent Keynote Talks:</u>

• The IEEE GLOBECOM 2013, December 9-13, 2013, Atlanta, Georgia, USA

IF25: Big Data Cloud Networking

http://www.ieee-globecom.org/2013/indforum.html#.Uv6HgbQpp9Q

• The 2013 IEEE International Conference on Internet of Things (iThings2013), Beijing, China, August 20-23, 2013: "The Internet of Things (IoT) Big Data Analytics"

http://www.china-iot.net/keynotes\_Daneshmand.htm

- International Conference on Cyber-enabled distributed computing and Knowledge Discovery, 10-12, October 2013, Beijing, China: "The Biggest Challenge of the Big Data: Sensor Data Analytics" <u>http://www.cyberc.org/InnerPage.asp?ClassId=D19175543AD0EFA2878135DF7309A9F</u> <u>3</u>
- The 4<sup>th</sup> International Symposium on IT Convergence Engineering, July 12-13, 2012, Seoul, South Korea: "Big Data: Definition, Recent Applications, and Future Directions" <u>http://isitce.postech.ac.kr/</u>
- IEEE ISCC 2011, Corfu, Greece, June 28 July 1: Intelligent Network Operations and Management it's about the Data <u>http://www.ieee-iscc.org/2011/speakers.htm</u>
- ICC 09, Dresden, Germany, June 14-18: Industry-Academia Joint Research Collaborations http://www.ieee-icc.org/2009/panels.html

- IEEE ISCC 2008, Marrakesh, Morocco, July 6-8: Ten Years of Experimentation in Information Mining & Software Research with applications in Telecommunications Industry <u>http://www.comsoc.org/iscc/2008/keynotes.html</u>
- ICT 2008, St. Petersburg, Russia, June 16-18
- ICISTM 2008, 6-8 March, Dubai, UAE: Data Mining with Telecom Applications <u>http://www.imt.edu/icistm2008/index.asp</u>

# **Professional Journals Editorship**

- **IEEE Journal Chair, Steering Committee**, IEEE Internet of Things Journal (March 2013 Present)
- **Guest Editor**, IEEE Sensors Journal Special Issue I on Internet of Things (to be published in September 2013)
- Guest Editor, IEEE Communications Magazine SI on Advances in Passive Optical Networks (February 2011)
- Guest Editor, ACM/Springer Mobile and Network Applications Journal Special Issue on WICON 2010 (2011)
- **Guest Editor**, Springer Journal of Network and Systems Management Special Issue on Advances in Optical Control and Management (September 2009)

### AFFILIATION

- Member, Institute of Electrical and Electronics Engineers (IEEE).
- Member, American Statistical Association (ASA).