

**Professional Preparation**

University of Pittsburgh, Electrical Engineering      B.S. 1984  
North Carolina State University Computer Engineering      M.S. 1990  
North Carolina State University Computer Engineering      Ph.D. 1993

**Appointments**

- *Associate Professor*, Computer Science, UNC Charlotte, since July 2003
- *Director*, Diversity in Information Technology Institute, UNC Charlotte, since January 2004.
- *Faculty Associate*, Academic Affairs, UNC Charlotte, 50% time working for Provost to increase the representation of women and minorities in STEM disciplines campus-wide, January 2005 – December 2005.
- *Assistant Professor*, Computer Science, UNC Charlotte, August 2000 – 2003.
- *Assistant Professor*, Electrical & Computer Engineering, UNC Charlotte, August 1995 – 2000.
- *Assistant Professor*, Computer Science, Winthrop University, August 1994 – August 1995.
- *Staff Engineer*, IBM Corp., Charlotte, NC, May 1987 – August 1994.
- *Engineer*, IBM Corp., Research Triangle Park, NC., May 1984 – May 1987.

**Publications:**

1. B. Cao, T. Dahlberg, "Soft Capacity Modeling for WCDMA Radio Resource Management," IEEE Brazilian Computer Society Journal (BCSJ), No. 3, Vol. 8, April 2003, pp. 6-17.
2. S. Nadjm-Tehrani, K. Najarian, C. Curescu, T. Lingvall, T. Dahlberg, "Adaptive Load Control Algorithms for 3<sup>rd</sup> Generation Mobile Networks," Proc. ACM Modeling and Simulation of Wireless and Mobile Systems (MSWiM), Atlanta, Georgia, Sept. 2002.
3. D. Tipper, T. Dahlberg, H. Shin, and C. Charnsripinyo, "Providing Fault Tolerance in Wireless Access Networks," IEEE Communications Magazine, Vol. 40, No. 1, Feb. 2002, pp. 58-64.
4. D. Tipper, C. Charnsripinyo, H. Shin, and T. Dahlberg, "Survivability Analysis for Mobile Cellular Networks," Communication Networks and Distributed Systems Modeling and Simulation Conference 2002, San Antonio, Texas, Jan. 27-31, 2002.
5. T. Dahlberg, J. Jung, "Survivable Load Sharing Protocols: A Simulation Study," ACM/Baltzer Science Wireless Networks Journal (WINET), May 2001.

**Other Related**

1. V. Namboodiri, T. Dahlberg, "Experimental Analysis of a Hybrid Proxy-based Multimedia Adaptation Scheme," 7<sup>th</sup> IASTED International Conference on Internet and Multimedia Systems and Applications (IMSA), Hawaii, USA, August 13-15, 2003.
2. T. Dahlberg, D. Tipper, B. Cao, C. Charnsripinyo, "Survivability in Wireless Mobile Networks," chapter 3 of Quality and Reliability of Large Scale Telecom Systems: Case Study Olympic Games, P. Stavroulakis (editor), John Wiley & Sons, 2002.
3. H. Shin, C. Charnsripinyo, D. Tipper, T. Dahlberg, "The Effects of Failures in PCS Networks," Proceedings of Third International Workshop on the Design of Reliable Communication Networks, Oct., 2001, Budapest, Hungary.
4. T.A. Dahlberg, K.R. Subramanian, "Visualization of Mobile Network Simulations," Simulation, The Journal of the Society for Computer Simulation International, September/October 2001.
5. T.A. Dahlberg, K.R. Subramanian, "Visualization of Real-time Survivability Metrics for Mobile Networks," Proc. Modeling and Simulation of Wireless and Mobile Systems (MSWiM), Aug. 2000.

## Synergistic Activities

1. Initiated and direct the Diversity in Information Technology Institute at UNC Charlotte. Highlights of DITI activities include the following:
  - Established the annual ***DITI: Teachers & Counselors Workshop***. This College of IT and College of Education collaboration was sponsored by the AT&T Foundation, Z. Smith Reynolds Foundation, IBM, and Time Warner Cable, to host a 5-day workshop on the UNC Charlotte campus to provide diversity and technology training to middle school teachers and guidance counselors. *This is the first workshop of its kind that focuses on increasing the technology comfort level and IT-awareness of K-12 Guidance Counselors as a mechanism towards encouraging a more diverse population of students to pursue STEM studies.*
  - ***Girls are I.T.!*** College of IT has partnered with the ***Girl Scouts, Hornets' Nest Council*** to provide IT activities for their NSF funded project called *Girls are I.T.!* The COIT is developing the ***Wireless Sensors: Exploring Remote Sites with Mobile Vision Equipped Robots*** activity to reside in an IT bus. The bus will introduce 11-14 year old girls to IT through hands-on activities. The COIT will also provide student volunteers to travel with the bus.
  - ***“Lead to Succeed While Challenging Stereotypes”***: The Colleges of IT and Business worked with the American Association of University Women (AAUW) to co-host this **student leadership conference** at UNC Charlotte on March 26 to kick-off the 2004 annual conference of the AAUW-NC. The conference was partially funded by the Charlotte Research Institute.
  - ***MentorNet***: Enrolled UNC Charlotte in MentorNet, an online community that increases student retention by providing the opportunity to all undergraduate and graduate students in IT, Engineering, Physics, Chemistry, Biology, and Math to have one-on-one industry mentors. 61 UNC Charlotte students signed up to participate in the online MentorNet community, and 45 of these students have been matched with one-on-one mentors.
2. Serving as Faculty Associate to the UNC Charlotte Provost to work on Diversity in Science, Technology, Engineering and Mathematics in K-16 education, to January 2005-December 2005.
3. Serve on the Steering Committee of NCEITA (NC Electronics and Industry Technology Association) WISE (Women in Science and Engineering); helped develop the Charlotte chapter that brings together women in academia and industry to broaden participation in IT industry.

## Collaborators

Asis Nasipuri, Gail Ahn, Susan Winter, Kayvan Najarian, Min Shin, David Royster, Bob Audette, Marty Bray, Dawson Hancock, David Tipper, Simin Nadjm-Tehrani.

## Graduate Advisors

Dharma Agrawal, University of Cincinnati; Arne Nillson, North Carolina State University; Ionnis Viniotis, North Carolina State University

## Thesis Advisees

Bing Cao, Bill Elderidge, Bill Heybruck, Jinwie Jung, Surekha Pangamamula, Axay Shah, Karan Sood, Amit Suratkar, Vinod Namboodiri, Omkar Dalvi, Shirisha Thummala, Navatha Tirung, Lijuan Cao, Pratibha Bhasin, Craig Taylor, Marguerite Doman, Arvind Somya.