

**Professor WEIDER D. YU**

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**EDUCATION:**

<b>M.S. Computer Science</b>	<b>State Univ. of New York at Albany (NY)</b>
<b>Ph.D. Elec. Eng. &amp; Comp. Sci.</b>	<b>Northwestern University (IL)</b>
<b>MBA Business Administration</b>	<b>University of Chicago (IL) (in progress)</b>
<b>CERT. Security Engineering</b>	<b>Carnegie Mellon University (PA)</b>

**ACADEMIC & PROFESSIONAL EXPERIENCE:**

**Associate Professor,**

Computer Engineering Department,  
College of Engineering,  
San Jose State University, San Jose, CA.

**Distinguished Member of Technical Staff/Senior Manager**

Switching Quality System Department, Lucent Technologies-  
Bell Labs (formerly called AT&T Bell Laboratories), Naperville, Illinois.

**Member of Technical Staff,** Software Productivity/Quality and  
Advanced Design Technology Group, AT&T Bell Laboratories,  
Naperville, IL.

**Adjunct Associate Professor,**

Electrical Engineering and Computer Science Department,  
University of Illinois, Chicago, IL.

**Adjunct Assistant Professor,**

Electrical Engineering and Computer Science Department,  
University of Illinois, Chicago, IL.

**Computer Laboratory Coordinator,**

Computer Science Research Laboratory,  
Electrical Engineering and Computer Science Department,  
Northwestern University, Evanston, IL.

**PRESENT POSITION:**

## **Professor**

Computer Engineering Department,  
College of Engineering,  
San Jose State University,  
San Jose (Silicon Valley), California 95192-0180

### **FOCUSED RESEARCH AND INTEREST AREAS:**

- Software security, web service security, cloud computing security, computer security, security engineering and privacy.
- Web based software engineering (requirement, design, implementation and testing), web services and cloud computing software development technology.
- Service Oriented Architecture (SOA), SOA oriented software modeling and development, cloud service engineering, service governance.
- eHealthcare and mHealthcare software and embedded system technology.
- Mobile systems technology (smartphone, Android and Windows based smartphone, iPhone, tablet, iPad, etc.).
- Software engineering process, Agile process, Personal Software Process (PSP), Team Software Process (TSP).
- Software and service oriented quality management and engineering.
- Wireless mobile systems design and engineering, and wireless communications.
- Embedded systems software technology.
- Distributed software engineering, distributed systems, middleware design.
- Software systems, software development methodologies, software virtualization, software tools.
- Systems software (Android based systems and tools, assemblers, device drivers, and compilers, etc.)
- Software estimation technology, software measurement metrics, project management methodology/tools.
- Requirement traceability engineering, requirement specifications.
- SEI CMMI (Capability Maturity Model Integrated) models and assessment.
- High level specification language design, C/C++ programming language guidelines and techniques.
- Data warehousing, data mining and semantic web.
- .NET and Java software framework.
- Relational database software specification language automation.
- Software faults (fault flow and fault removal) analysis, software quality engineering and assurance.
- Software quality fault prevention and detection tools and techniques.
- Organizational goals deployment and entrepreneurial/strategic goals (speed, cost and quality).

### **SELECTED MAJOR RECENT PROFESSIONAL PUBLICATIONS:**

#### **Journal Paper Publications:**

1. Weider D. Yu, "A Software Fault Prevention Approach in Coding and Root Cause Analysis," *Bell Labs Technical Journal*, Volume 3, Number 2, April-June 1998, pp. 3-21.

The article was first published online August 14, 2002, DOI: 10.1002/bltj.2101, Wiley Online Library.

2. Weider D. Yu, Alvin Barshefsky, and Steel Huang, "An Empirical Study of Software Fault Preventable at Personal Level in A Very Large Software Development Environment," *Bell Labs Technical Journal*, Volume 2, Number 3, summer 1997, pp. 221-232. The article was first published online August 14, 2002, DOI: 10.1002/bltj.2076, Wiley Online Library.
3. Weider D. Yu, "Verifying Software Requirements: A Requirement Tracing Methodology and Its Software Tool," *IEEE Communications Journal on Selected Areas in Communications*, Volume 12, Number 2, February 1994, pp. 234-240.
4. Weider D. Yu, D. Paul Smith, and Steel T. Huang, "Software Productivity Measurements," *AT&T Technical Journal*, Volume 69, Number 3, May/June 1990, pp. 110-120. The article was first published online July 29, 2013, DOI: 10.1002/j.1538-7305.1990.00339.x, Wiley Online Library.
5. Weider D. Yu, "A Modeling Approach to Software Cost Estimation," *IEEE Communications Journal on Selected Areas in Communications*, Volume 8, Number 2, February 1990.
6. Weider D. Yu, Will E. Lehder, and D. Paul Smith, "Software Estimation Technology", *AT&T Technical Journal*, Volume 67, Number 4, July/August 1988, pp. 10-18. The article was first published online July 29, 2013, DOI: 10.1002/j.1538-7305.1988.tb00634.x, Wiley Online Library.
7. Weider D. Yu, Archana Ramani, "Design and Implementation of A Personal Mobile Medical Assistant," *The Journal on Information Technology in Healthcare*, Volume 4, Number 2, April 1 2006, pp. 92-102.
8. Weider D. Yu, Yan Chen, "Partitionable Mobile File System over Ad-Hoc Networks," *The International Journal of Computer Science and Network Security*, Volume 6, Number 7B, July 30 2006, pp. 113-126.
9. Weider D. Yu, Rachana B. Radhakrishna, Sumana Pingali, Vijaya Kolluri, "Modeling the Measurements of QoS Requirements in Web Services Systems," *SIMULATION Journal-Transactions of The Society for Modeling and Simulation International*, Volume 83, Number 1, June 28 2007, pp. 75-91.
10. Pradeep Ray, Nandan Parameswaran, Victor Chan, Weider Yu, "Awareness Modeling of Collaborative Mobile e-Health," in *Journal of Telemedicine and Telecare*, (*The Leading International Journal on Telemedicine and e-Health*, *The Royal Society of Medicine Press, UK*) Volume 14, Number 7, 2008, pp. 381-385.
11. Weider D. Yu, Pradeep Ray, Tiberiu Motoc "WISH – A Wireless Mobile Multimedia Information System in Healthcare Using RFID," *The Journal of Telemedicine and e-Health – The Official Journal of American Telemedicine Association*, Volume 14, Number 4, May 2008, pp. 362-370.
12. Weider D. Yu, Seshadri K. Yilayavilli, "A Semantic-Based Dynamic Search Engine Design and Implementation for Electronic Medical Records," *International Journal of E-Health and Medical Communications*, Volume 1, Issue 2, April-June 2010, pp. 61-73.

13. Weider D. Yu, Lavanya Balamurali, Sandeepa Ameerichetty, Warren Ng, "Security and Privacy in a U-Healthcare System Using Wireless Smart Mobile Agents and EHR," *Journal of eHealth Technology and Applications*, Volume 8, Number 1, July 2010, pp. 58-61.
14. Weider D. Yu, Radhika Bhagwat, "Modeling Emergency and Telemedicine Health Support System: A Service Oriented Architecture Approach Using Cloud Computing," *Journal of E-Health and Medical Communications*, Volume 2, Number 3, July-September 2011, pp. 63-88.
15. Weider D. Yu, Jatin Patel, Vishal Mehta, Ashih Joshi, "An Approach to Design a SOA Services Governance Architecture for an u-Healthcare System with Mobility," *Journal of E-Health and Medical Communications*, Volume 3, Number 2, April-June 2012, pp. 36-65.
16. Weider D. Yu, Ashwini Sathyanarayana, Srivarsha Rao, Miby Jose Panakkel, "A SOA Based System Development Methodology for Cloud Computing Environment: Using uHealthcare as Practice," *Journal of E-Health and Medical Communications*, Volume 3, Number 4, October-December 2012, pp. 42-63.
17. Weider D. Yu, Xiao Su, Jason Hansen, "A Smartphone Design Approach to User Communication Interface for Administering Storage System Network," *Journal of Network Protocols and Algorithms*, Volume 4, Number 4, December 2012, pp. 126-155.

#### **Book Publication:**

18. Weider D. Yu, Art Price, and Margie Wells, "Best Current Practices: Software Cost Estimation," *AT&T Best Current Practices (Book Series)*, AT&T Bell Laboratories, 1992.

#### **Conference Paper Publications:**

19. Weider D. Yu, "Measuring Software Productivity," *Proceedings of the 15th International Computer Software Applications Conference*, Tokyo, Japan, IEEE Computer Society, 1991.
20. Weider D. Yu, "An 5ESS Switch On-line Recording Tools for Software Review and Inspection," *Bell Labs Technical Memorandum*, AT&T Bell Laboratories, October 1991.
21. Weider D. Yu, "Software Design Checklists," *Bell Labs Technical Memorandum*, AT&T Bell Laboratories, July 1991.
22. Weider D. Yu, "Improving the Quality of Software Cost Estimation," *Proceedings of the National Communication Forum*, Volume 42, Number 2, October 1988.
23. Weider D. Yu, "5ESS Switch Project Requirement Traceability Methodology and Its Tools - Project Standard", 55321-890908-01, *Bell Labs Technical Memorandum*, AT&T Bell Laboratories, September 1989.

24. Weider D. Yu, "5ESS Switch Software Quality Factors," 55321-890905-01, *Bell Labs Technical Memorandum*, AT&T Bell Laboratories, September 1989.
25. Weider D. Yu, "Software Fault Removal Effectiveness and Fault Flow Analysis," 55635-900917-01IM, *Bell Labs Technical Memorandum*, AT&T Bell Laboratories, July 1990.
26. Weider D. Yu, Hal Lowe and Stephen R. Cook, "Software Quality Survey and Analysis," 55635-891106-01IM, *Bell Labs Technical memorandum*, AT&T Bell Laboratories, November 1989.
27. Weider D. Yu, "Software Cost Estimation," *Proceedings of the International Computer Symposium*, December 1988.
28. Weider D. Yu, "5ESS Switch Development Process Cost Model," 55635-900206-01IM, *Bell Labs Internal Memorandum*, AT&T Bell Laboratories, February, 1990.
29. Weider D. Yu, "Software Metrics for 5ESS Switching Systems," 55321-880709-01, *Bell Labs Technical Memorandum*, AT&T Bell Laboratories, July 1988.
30. Weider D. Yu, "5ESS Switch Coding Fault Prevention Guidelines," *5ESS Switch On-line Methodology Document*, AT&T Bell Laboratories, September 1992.
31. Weider D. Yu, "5ESS Switch Coding Fault Prevention Checklist," *5ESS Switch On-line Methodology Document*, AT&T Bell Laboratories, September 1992.
32. Weider D. Yu, "Throughput and Productivity Measurements in a Very Large Communication Technology Development Organization," The 9<sup>th</sup> Lucent Technologies Software Symposium, April 11-14, 2000.
33. Weider D. Yu, "An Approach in R&D Throughput and Productivity Measurement," *The 2003 IEEE International Communications in Quality and Reliability Workshop (CQR 2003)*, April 7-10, 2003.
34. Weider D. Yu, Felix Schulp "A Quality Analysis in Requirement Engineering Process in Communication Systems," *The 2004 IEEE International Communications in Quality and Reliability Workshop (CQR 2004)*, San Antonio, Texas, April 26-29, 2004.
35. Weider D. Yu, "Mobile Personal Computing Technology in Problem-Based Learning Environment," in *Proc. The 2004 Sino-American Technology and Engineering Conference (SITEC 2004)*, April 19-28, 2004, Beijing, China, pp. 53-64.
36. Weider D. Yu, Passarawarin Supthaweek, Dhanya Aravind, "Trustworthy Web services Based on Testing," in *Proc. The IEEE International Symposium on Service Oriented System Engineering (SOSE 2005)*, October 20-21, 2005, Beijing, China, pp. 166-177.
37. Weider D. Yu, "A Mobile Computing Collaborative Framework for Problem-Based Learning Environment," in *Proc. The 2005 IEEE/ASEE International Conference for Frontier in Education*, October 19-22, 2005, Indianapolis, USA.
38. Weider D. Yu, Archana Mansukhani, "A Reusable Intelligent Authorization Design for Web Services Software Security," in *Proc. The 2nd International E-Business and*

*Telecommunication Networks-sponsored by British Computer Society(BCS) and Microsoft, October 3-7, 2005, Microsoft Center at Reading, U.K., pp. 298-303.*

39. Weider D. Yu, Archana Mansukhani, "An Approach in Designing Authorization Layer for Web Service Software Using Expert System Inference Engine," in *Proc. The 8<sup>th</sup> International Conference on Computer Science and Informatics (ICCSI 2005)*, July 21-26, 2005, Salt Lake City, Utah, USA, pp. 316-321.
40. Weider D. Yu, Archana Ramani, "Design and Implementation of A Personal Mobile Medical Assistant," in *Proc. The 7<sup>th</sup> IEEE International Conference on Enterprise Networking and Computing in Healthcare Industry (HEALTHCOM 2005)*, June 23-25, 2005, Busan, Korea, pp. 172-178.
41. Weider D. Yu, Archana Mansukhani, "An Intelligent Authorization Security Layer for Web Services Based on Service Oriented Architecture Platform," in *Proc. The 2nd IEEE International Workshop on Collaborative Computing, Integration, and Assurance (WCCIA 2006)*, April 27-28, 2006, Gyeongju, Korea, USA, pp. 190-195.
42. Weider D. Yu, Ellora Nayak, "ARSL: A Language for Authorization Rule Specification in Software Security," in *Proc. The 11<sup>th</sup> IEEE International Symposium on Computers and Communications (ISCC 2006)*, June 26-29, 2006, Cagliari, Sardinia, Italy, pp. 54-62.
43. Weider D. Yu, Dhanya Aravind, Passarawarin Supthaweesuk, "Software Vulnerability Analysis for Web Services Software Systems," in *Proc. The 11<sup>th</sup> IEEE International Symposium on Computers and Communications*, June 26-29, 2006, Cagliari, Sardinia, Italy, pp. 740-748.
44. Weider D. Yu, Pradeep Ray, Tiberiu Motoc "A RFID Technology Based Wireless Mobile Multimedia System in Healthcare\*," in *Proc. The 8<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services*, August 17-19, 2006, New Delhi, India, pp. 1-12 (\* The paper received the **Best Paper Award (Researcher)** of the conference).
45. Weider D. Yu, Soumya R. Jonnalagadda, "Semantic Web and Mining in Healthcare," in *Proc. The 11<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services (HEALTHCOM 2006)*, August 17-19, 2006, New Delhi, India, pp. 198-201.
46. Weider D. Yu, Sharanya Doddapaneni, Savitha Murthy, "A Privacy Assessment Approach for Service Oriented Architecture Applications," in *Proc. The IEEE International Symposium on Service Oriented System Engineering (SOSE 2006)*, October 25-27, 2006, Shanghai, China, pp. 67-75.
47. Weider D. Yu, Mark A. Chekhanovskiy "An Electronic Health Record Content Protection System Using SmartCard and PMR<sup>TM</sup>" in *Proc. The 9<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services (HEALTHCOM 2007)*, June 19-22, 2007, Taipei, Taiwan, pp. 11-18.
48. Weider D. Yu, Vijayalakshmi Jothiram "Security in Wireless Mobile Technology for Healthcare Systems," in *Proc. The 9<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services*, June 19-22, 2007, Taipei, Taiwan, pp. 308-311.
49. Weider D. Yu, Savitha Murthy, "PPMLP: A Special Modeling Language Processor for

- Privacy Policies,” in *Proc. The 11<sup>th</sup> IEEE International Symposium on Computers and Communications (ISCC 2007)*, July 1-4, 2007, Aveiro, Portugal, pp. 851-858.
50. Weider D. Yu, Giri Patil, “A Workflow-Based Test Automation Framework for Web Based Systems,” in *Proc. The 11<sup>th</sup> IEEE International Symposium on Computers and Communications (ISCC 2007)*, July 1-4, 2007, Aveiro, Portugal, pp. 333-340.
  51. Weider D. Yu, Sunita Sharma, “A Mobile Database Design Methodology for Mobile Software Solutions,” in *Proc. The Thirty-first IEEE International Computer Software & Applications Conference (COMPSAC-EMOBS 2007)*, July 23-27, 2007, Beijing, China, pp. 121-124 (Vol. II). (The paper is one of **the Top 100 (56<sup>th</sup>) papers accessed in IEEE Xplore** during the month of March 2008.)
  52. Weider D. Yu, Andy Lin, “The Design and Implementation of A Search Engine Marketing Management System (SEMMS) for Service-Oriented Architecture Platform,” in *Proc. The IEEE International Symposium on Service Oriented System Engineering (SOSE 2007)*, October 24-26, 2007, Hong-Kong, China, pp. 513-519.
  53. Weider D. Yu, “An Approach in Software Sizing and Its Estimation Tool,” *The 2008 IEEE International Communications in Quality and Reliability Workshop (CQR 2008)*, April 29-May 1, 2008, Carefree, Arizona, USA, pp. 1-6.
  54. Weider D. Yu, Himani Goel, Tamseela Amjad, Tanakom Talawat, “An Approach of Mobile Database Design Methodology for Mobile Software Solutions,” in *Proc. The Third IEEE International Workshop on Mobile Commerce and Services (WMCS 2008) in conjunction with the Third IEEE International Conference on Grid and Pervasive Computing (GPC)*, May 25-28, 2008, Kuming, China, pp. 138-144.
  55. Weider D. Yu, Ellora Nayak, “An Algorithmic Approach to Authorization Rules Conflict Resolution in Software Security,” in *Proc. The Thirty-Second IEEE International Computer Software & Applications Conference (COMPSAC 2008)*, July 28-August 1, 2008, Turku, Finland, pp. 32-36.
  56. Weider D. Yu, Shruti Nargundkar, Nagapriya Tiruthani, “A Phishing Vulnerability Analysis of Web Based Systems,” in *Proc. The 12<sup>th</sup> IEEE International Symposium on Computers and Communications (ISCC 2008)*, July 6-9, 2008, Marrakech, Morocco, pp. 326-331.
  57. Weider D. Yu, Roopa Gummadikayala, Sriram Mudumbi, “A Web-Based Wireless Mobile System Design of Security and Privacy Framework for u-Healthcare,” in *Proc. The 10<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services (HEALTHCOM 2008)*, July 7-9, 2008, Biopolis, Singapore, pp. 96-101.
  58. Weider D. Yu, Jaykumar Patel, Muthukrishna Chitralamuthu, Siddharth S Parakh, “An Empirical Approach to A system Design Methodology for Mobile Peer-to-Peer Computing,” in *Proc. The 12<sup>th</sup> IEEE International Symposium on Computers and Communications*, July 6-9, 2008, Marrakech, Morocco, pp. 501-506.
  59. Weider D. Yu, Vijayalakshmi Jothiram, “Security and Privacy for WiMoHS (Wireless Mobile Healthcare System),” in *Proc. The 10<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services*, July 7-9, 2008, Biopolis, Singapore, pp. 132-135.

60. Weider D. Yu, Margaret Chan, "A Service Engineering Approach to A Mobile Parking Guidance System in u-Healthcare," in *Proc. The 2008 IEEE International Conference on e-Business Engineering (ICEBE 2008)*, October 22-24, 2008, Xi'an, China, pp. 255-261.
61. Weider D. Yu, Asim Siddiqui, "Towards A Wireless Mobile Social Network System Design in Healthcare," in *Proc. The Fifth IEEE International Workshop on Mobile Commerce and Services (WMCS 2009) in conjunction with the Third IEEE International Conference on Multimedia and Ubiquitous*, June 4-6, 2008, Qingdao, China, pp. 429-436.
62. Weider D. Yu, Shruti Nargundkar, Nagapriya Tiruthani, "PhishCatch - A Phishing Detection Tool," in *Proc. The Thirty-Third IEEE International Computer Software & Applications Conference (COMPSAC 2009)*, July 20-24, 2009, Seattle, USA, Vol. 2, pp. 451-456.
63. Weider D. Yu, Chia H. Ong, "A SOA Based Software Engineering Design Approach in Service Engineering," in *Proc. The 2009 IEEE International Conference on e-Business Engineering (ICEBE 2009)*, October 21-23, 2009, Macau, China, pp. 409-416.
64. Weider D. Yu, Margaret Chan, "A Modeling Approach of Web-Based Mobile Parking Guidance System and Secured EHR in e-Healthcare," in *Proc. The 11<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services (HEALTHCOM 2009)*, December 16-18, 2009, Sydney, Australia, pp. 116-123.
65. Weider D. Yu, Karthika Srinivasan, Sreedevi Pericherla, "An Approach in Security and Privacy for Service Governance Framework," in *Proc. The 2010 IEEE International Conference on e-Business Engineering (ICEBE 2010)*, November 10-12, 2010, Shanghai, China, pp. 313-318.
66. Weider D. Yu, Ashish Joshi, Jatin Patel, Vishal Mehta, "A SOA Service Governance Approach to u-Healthcare System with Mobility Capability," in *Proc. The 2011 IEEE International Conference on Communications (ICC 2011)*, June 5-9, 2011, Kyoto, Japan, (6 camera ready pages).
67. Weider D. Yu, Juanita Mah, "Designing A Community-based Social Trust System in Public Health Using Service Oriented Architecture," in *Proc. The 2011 IEEE International Conference on e-Health, Networking, Applications, and Services (Healthcom 2011)*, June 13-15, 2011, Columbia, Missouri, USA, pp. 324-329. (\* The paper is one of the **five finalists for Best Paper Award** of the conference).
68. Weider D. Yu, Hongbin Yuan, "An Approach to Explore Mobile Software Engineering Advances in Cloud Computing Environment," in *Proc. The Thirty-Fifth IEEE International Computer Software & Applications Conference (COMPSAC 2011)*, July 18-22, 2011, Munich, GERMANY, Vol. 2, pp. 292-297.
69. Weider D. Yu, Binal Joshi, Priyanka Chandola, "A Service Modeling Approach to Service Requirements in SOA and Cloud Computing – Using A u-Healthcare System Case," in *Proc. The 2011 IEEE International Conference on e-Health, Networking, Applications, and Services (HEALTHCOM 2011)*, June 13-15, 2011, Columbia, Missouri, USA, pp. 237-240.
70. Weider D. Yu, Akash Panwar, Vikas Dahuja, Yogesh Goyal, "A Multimedia Based Hybrid System for Healthcare Application," in *Proc. The 2012 IEEE International Conference on e-Health, Networking, Applications, and Services (HEALTHCOM 2012)*, October 10-13,

2012, Beijing, China, pp.321-324.

71. Weider D. Yu, Alla Panova, "An Architectural Design Framework for an Electronic Health Record System with Hospice Application," in *Proc. The 2012 IEEE International Conference on e-Health, Networking, Applications, and Services (HEALTHCOM 2012)*, October 10-13, 2012, Beijing, China, pp. 367-370.
72. Weider D. Yu, Kyle Le, "Towards a Secure Software Development Lifecycle with SQUARE+R," in *Proc. The Thirty-Sixth IEEE International Computer Software & Applications Conference (COMPSAC 2012)*, July 16-20, 2012, Izmir, Turkey, Vol. 2, pp. 565-570.
73. Weider D. Yu, Jason Hanson, "A Smartphone Design Approach to User Communication Interface for Administering Storage System Network," in *Proc. The 2012 IEEE International Conference on Communications (ICC 2012)*, June 10-15, 2012, Ottawa, Canada, pp. 6555-6559.
74. Weider D. Yu, Hargun Hansrao, Kirandeep Dhillon, Pradeep Desinguraj, "NFC Based m-Health Application Focusing on Security, Privacy and Performance," in *Proc. The 2013 IEEE International Conference on Communications (ICC 2013)*, June 9-13, 2013, Budapest, Hungary.

#### **AWARDS/HONORS:**

1. 2011 **Best Research Paper Award (Finalist)** – 2011 IEEE 13<sup>th</sup> International Conference on e-Health Networking, Applications and Services (Healthcom 2011)
  - Weider D. Yu, Juanita Mah, "Designing A Community-based Social Trust System in Public Health Using Service Oriented Architecture," in *Proc. The 2011 IEEE International Conference on e-Health, Networking, Applications, and Services (Healthcom 2011)*, June 13-15, 2011, Columbia, Missouri, USA, pp. 324-329.
  - Author and advisor
2. 2008 **Paper Among Top 100 Cited by IEEE Xplore** – The paper is one of the Top 100 (56<sup>th</sup>) papers accessed in IEEE Xplore during the month of March 2008.
  - Weider D. Yu, Sunita Sharma, "A Mobile Database Design Methodology for Mobile Software Solutions," in *Proc. The Thirty-first IEEE International Computer Software & Applications Conference (COMPSAC-EMOBS 2007)*, July 23-27, 2007, Beijing, China, pp. 121-124 (Vol. II).
  - Author and advisor
3. 2006 **Best Paper Award (Researcher)** – 2006 IEEE 8<sup>th</sup> International Conference on e-Health Networking, Applications and Services (Healthcom 2006)
  - Weider D. Yu, Pradeep Ray, Tiberiu Motoc "A RFID Technology Based Wireless Mobile Multimedia System in Healthcare\*," in *Proc. The 8<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services*, August 17-19, 2006, New Delhi, India, pp. 1-12.
  - Author and advisor

4. 2005 **Microsoft International Windows Embedded Systems Student Challenge** – “Going Beyond the Boundaries,” **Finalist**
  - “iFree” Team - San Jose State University
  - Team Mentor/Advisor
5. 2000 “**Outstanding Asian American in Lucent Technologies**” – honored in the 2000 National Lucent 4A (Asian American Association for Advancement) Conference Held in Parsippany, New Jersey, August 9-11 2000.
6. 1998 Lucent Technologies Switching and Access Systems, **Employee Excellence and Quality Improvement Award**, October 2, 1998.
  - 5ESS Switch Software Interval Measurement and Reduction
7. 1995 **IEEE Communications Society - 1995 Chapter of the Year Award**, Chair of the IEEE Communications Society - Chicago Chapter (1994 - present).
  - Excellence in Chicago Chapter Operation and Its Programs
  - Chair of the IEEE Communications Society – Chicago Chapter
8. 1994 AT&T Network Systems Quality **Team Excellence Award**
  - Coding Fault Prevention Team Recognized at AT&T Network Systems
  - Excellence in Achieving Results Through Cost Effective Solutions
  - Team Leader
9. 1993 AT&T Switching Systems Business Unit Quality **Team Excellence Award**
  - Selected Team To Represent AT&T Switching Systems
  - Excellent Results in Coding Fault Prevention
  - Team Leader
10. 1993 AT&T Switching Systems U.S. Customer Business Unit **Employee Excellence Award**
  - The No. 1 Team Selected To Represent U.S. Customer Business Unit
  - Excellent Results in Coding Fault Prevention
  - Team Leader
11. 1992 AT&T Switching Systems U.S. Customer Business Unit **Employee Excellence Award**
  - Requirement Traceability and RADIX Tool Team
  - Excellent Achievements in Methodology and Tool Development
  - Team Leader
12. 1994 AT&T Switching Systems International Customer Business Unit **Employee Excellence Award**
  - ISO 9000-3 Certification Achievement for ISCBU
13. 1990 **AT&T Bell Laboratories Distinguished Member of Technical Staff Award**
14. 1987-2001 Various Individual Performance and Department Awards of Excellence
15. 1999 Department JR1A0D Award
  - Critical Contribution to Successful Implementation of the Policy Deployment Project on Throughput

## RECENT PROFESSIONAL ACTIVITIES:

**Technical Program Committee**, *The 2013 IEEE International Conference on Connected Vehicles*, IEEE Communications Society, Las Vegas, Nevada, December 2-6, 2013.

**Technical Program Committee**, *The 2013 37<sup>th</sup> IEEE International Computer Software and Applications Conference (COMPSAC 2013)*, IEEE Computers Society, Kyoto, Japan, July 22-26, 2013.

**Technical Program Committee and Segment Chair**, *The 2013 IEEE International Workshop on Communications Quality, Reliability, and Security (CQR 2013)*, IEEE Communications Society, Marco Island, Florida, USA, May 14-16, 2013

**Technical Program Committee**, *The 2012 36<sup>th</sup> IEEE International Computer Software and Applications Conference (COMPSAC 2012)*, IEEE Computers Society, Izmir, Turkey, July 16-20, 2012.

**Technical Program Committee and Track Chair**, *The 14<sup>th</sup> IEEE International Conference on e-Health Networking, Application and Services (HEALTHCOM 2012)*, IEEE Communications Society, Beijing, China , USA, June 10-13, 2012.

**Technical Program Committee and Segment Chair**, *The 2012 IEEE International Workshop on Communications Quality, Reliability, and Security (CQR 2012)*, IEEE Communications Society, San Diego, California, USA, May 15-17, 2012.

**Technical Program Committee**, *The 2011 35<sup>th</sup> IEEE International Computer Software and Applications Conference (COMPSAC 2011)*, IEEE Computers Society, Munich, Germany, July 18-21, 2011.

**Technical Program Committee and Track Chair**, *The 13<sup>th</sup> IEEE International Conference on e-Health Networking, Application and Services (HEALTHCOM 2011)*, IEEE Communications Society, Columbia, Missouri, USA, June 13-15, 2011.

**Technical Program Committee and Segment Chair**, *The 2011 IEEE International Workshop on Communications Quality, Reliability, and Security (CQR 2011)*, IEEE Communications Society, Naples, Florida, USA, May 12-14, 2011.

**Conference International Scientific Committee**, *The 12<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services (HEALTHCOM 2010)*, July 1-3, 2010, Lyon, France.

**Technical Program Committee**, *The 2010 IEEE International Workshop on Communications Quality, Reliability, and Security (CQR 2010)*, IEEE Communications Society, Vancouver, Canada, June 8-10, 2010.

**Workshop Co-chair**, *The IEEE 2010 International Mobile Health (mHealth) Workshop of The 12<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services (HEALTHCOM 2010)*, July 1-3, 2010, Lyon, France.

- Organized the workshop event
- Served as workshop co-chair
- Served as technical session chair

- Reviewed paper submissions

**Technical Program Committee**, *The IEEE 2010 15<sup>th</sup> International Symposium on Computers and Communications (ISCC 2010)*, IEEE Computers and Communications Societies, Riccione, Italy, June 22-25, 2010.

**Technical Program Committee**, *The 2009 33<sup>rd</sup> IEEE International Computer Software and Applications Conference (COMPSAC 2009)*, IEEE Computers Society, Seattle, USA, July 20-24, 2009.

**Region Coordinator**, *Asian-Pacific Ubiquitous Healthcare Technology Research Center (US Region)*, San Jose, CA, USA, 2008.

**Speaker**, on "An Algorithmic Approach to Authorization Rules Conflict Resolution in Software Security", *The 2008 NSF TRUST (Team for Research in Ubiquitous Secure Technology) Autumn Conference*, hosted by TRUST partner institution Vanderbilt University, Nashville, Tennessee, USA, November 11-12, 2008. (TRUST is a NSF sponsored security research team led by the University of California, Berkeley, with partner institutions Carnegie University, Cornell University, Mills College, San Jose State University, Smith College, Stanford University, and Vanderbilt University.)

**Technical Program Committee**, *The 2009 IEEE International Workshop on Communications Quality, Reliability, and Security (CQR 2009)*, IEEE Communications Society, Naples, Florida, USA, May 12-14, 2009.

**Technical Program Committee and Session Chair**, *The 2008 32<sup>nd</sup> IEEE International Computer Software and Applications Conference (COMPSAC 2008)*, IEEE Computers Society, Turku, Finland, July 28 – August 1 2008.

**Technical Program Committee**, *The 13<sup>th</sup> IEEE International Symposium on Computers and Communications (ISCC 2008)*, IEEE Computers and Communications Societies, Marrakech, Morocco, July 6-9 2008.

**Conference International Scientific Committee**, *The 10<sup>th</sup> IEEE International Conference on e-Health Networking, Applications and Services (HEALTHCOM 2008)*, July 7-9, 2008, Biopolis, Singapore.

**Program Committee Co-Chair**, *The Third IEEE International Workshop on Mobile Commerce and Services (WMCS 2008) in conjunction with the Third IEEE International Conference on Grid and Pervasive Computing (GPC)*, Kuming, China, May 25-28, 2008.

**Technical Program Committee**, *The 2008 IEEE International Workshop on Communications Quality, Reliability, and Security (CQR 2008)*, IEEE Communications Society, Carefree, Arizona, USA, April 29 – May 1 2008.

**Speaker**, on "ARSL: A Language for Authorization Rule Specification in Software Security", *The 2007 NSF TRUST (Team for Research in Ubiquitous Secure Technology) Autumn Conference*, hosted by TRUST partner institution Cornell University, Ithaca, New York, USA, October 10-11, 2007. (TRUST is a NSF sponsored security research team led by the University of California, Berkeley with partner institutions Carnegie University, Cornell University, Mills College, San Jose State University, Smith College, Stanford University, and Vanderbilt University.)

**Technical Program Committee**, *The International Workshop on Modeling, Design and Analysis for Service-oriented Architecture (MDA4SOA 2007)*, IEEE Computers Society, Salt Lake City, Utah, USA, July 13, 2007.

**Technical Program Committee and Session Chair**, *The 12<sup>th</sup> IEEE International Symposium on Computers and Communications (ISCC 2007)*, IEEE Computers and Communications Societies, Aveiro, Portugal, July 1-4 2007.

**Technical Program Committee and Session Chair**, *The 9<sup>th</sup> IEEE International Conference on e-Health Networking, Application and Services (HEALTHCOM 2007)*, IEEE Communications Society, Taipei, Taiwan, June 19-22 2007.

**Workshop Technology Segment Chair** (for 3 technology sessions), *The 2007 IEEE International Workshop on Communications Quality, Reliability, and Security (CQR 2007)*, IEEE Communications Society, Fort Myers, Florida, USA, May 15-17 2007.

**Technical Program Committee**, *The 2006 IEEE International Global Communication Conference (GLOBECOM 2006)*, IEEE Communications Society, San Francisco, California, USA, November 27 – December 1 2006.

**Technical Program Committee and Finance Chair**, *The 30<sup>th</sup> IEEE International Computer Software and Applications Conference (COMPSAC 2006)*, IEEE Computers Society, Chicago, Illinois, USA, September 17 – 21 2006.

**Technical Program Committee**, *The International Workshop on Modeling, Design and Analysis for Service-oriented Architecture (MDA4SOA 2006)*, IEEE Computers Society, Chicago, Illinois, USA, September 18, 2006.

**Technical Program Committee and Session Chair**, *The 8<sup>th</sup> IEEE International Conference on e-Health Networking, Application and Services (HEALTHCOM 2006)*, IEEE Communications Society, New Delhi, India, August 20-22 2006.

**Invited Speaker**, *The Global Convention and Expo on Telemedicine and e-Health*, New Delhi, India, August 20-22 2006.

**Technical Program Committee**, *The 11<sup>th</sup> IEEE International Symposium on Computers and Communications (ISCC 2006)*, IEEE Computers and Communications Societies, Cagliari, Sardinia, Italy, June 26-29 2006.

**Technical Program Committee**, (in Communications QoS, Reliability and Performance Modeling), *The 2006 IEEE International Communication Conference (ICC 2006)*, IEEE Communications Society, Istanbul, Turkey, June 11-15 2006.

**Technical Program Committee**, *The 2005 IEEE International Global Communication Conference (GLOBECOM 2005)*, IEEE Communications Society, St. Louis, Missouri, USA, November/December 2005.

**Technical Program Committee**, *The 2005 IEEE International Communication Conference (ICC 2005)*, IEEE Communications Society, Seoul, Korea, May 2005.

**Technical Paper Session Chairs**, *The 2004 International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS 2004)*, (Session: Web Server Analysis), The Society for Modeling and Simulation International, San Jose, California, USA, July 25-29, 2004.

**Technical Program Committee**, *The 2004 IEEE International Consumer Communications and Networking Conference (CCNC 2004)*, IEEE Communications Society, Las Vegas, Nevada, USA, January 2004.

**Technical Program Committee**, *The 2004 IEEE International Global Communication Conference (GLOBECOM 2004)*, IEEE Communications Society, Dallas, Texas, USA, November/December 2004.

**Technical Program Committee**, *The 2004 IEEE International Communication Conference (ICC 2004)*, IEEE Communications Society, Paris, France, June 2004.

**Conference Committee**, *The 2003 IEEE International Requirements Engineering Conference (RE 2003)*, IEEE Computers Society, Monterey Bay, California, USA, September 2003.

**Technical Program Committee**, *The 2002 IEEE International Global Communication Conference (GLOBECOM 2002)*, IEEE Communications Society, Taipei, Taiwan, November 2002.

**Technical Program Committee**, *The 2001 IEEE International Communication Conference (ICC 2001)*, IEEE Communications Society, Helsinki, Finland, June 2001.

**Symposium Chairperson**, *Quality of Service (QoS) Symposium (organizer of 7 paper sessions)*, *The 2001 International Communication Conference (ICC 2001)*, IEEE Communications Society, Helsinki, Finland, June 2001.

**Panel Organizer**, *The 2000 International Communication Conference (ICC 2000)*, IEEE Communications Society, New Orleans, Louisiana, June 16-19, 2000.

**Steering Committee Chair**, *The 14th International Conference on Advanced Science and Technology*, Lucent Technologies-Bell Labs Innovations, Naperville, Illinois, April 4-5, 1998.

- The conference was sponsored by Lucent Technologies, Northwestern University, Motorola, National Fermi Accelerator Laboratory, and Chinese Academic and Professional Association.

**Technical Program Co-Chair**, *The 12th International Conference on Advanced Science and Technology*, University of Illinois at Chicago, Chicago, IL, April 1996.

**Organizer**, *IEEE Chicago Chapter Technical Seminar*, Lucent Technologies, Naperville, IL, May 1996.

**Organizer**, *IEEE Technical Seminar*, University of Illinois at Chicago, Chicago, IL, March 1996.

**Organizer**, *IEEE Technical Seminar*, Lisle, IL, February 1996.

**Organizer and Speaker**, *IEEE Technical Seminar*, Illinois Institute of Technologies, Chicago, IL, November 1995.

**Organizer**, *IEEE Technical Seminar*, AT&T Bell Laboratories, Naperville, IL, May 1995.

**Invited Speaker**, *IEEE Fox Valley Subsection Technical Seminar*, Lisle, IL, January 1995.

**Organizer**, *IEEE Technical Presentation Seminar*, Lisle, IL, November 1994.

**Program Committee**, *IEEE Communication Society 1994 Wireless/PCS Symposium*, University of Illinois at Chicago, 1994.

**Speaker**, *IEEE Communication Society 1993 International Quality Assurance Management Workshop*, May 1993.

**Technical Program Co-Chairperson**, *The 9th International Conference on Advanced Science and Technology*, Motorola, Schaumburg, IL, March 1993.

**Group Chair**, *1992 Modern Engineering and Technology Seminar*, Taiwan, 1992.

**Program Committee**, *1992 International Computer Symposium*, Taiwan, 1992.

**Session Chairperson & Speaker**, *1991 IEEE Computer Software Application Conference (COMPSAC)*, Tokyo, Japan, 1991.

**Conference Panel Organizer**, *1991 IEEE Computer Society COMPSAC Conference*, Tokyo, Japan, 1991.

**Committee Member**, *IEEE Computer Society Software Engineering Standards Committee*.

**Committee Member**, *IEEE Communications Society Quality Assurance Committee*.

**Committee Member**, *IEEE Software Productivity Standards Subcommittee*.

**Corporate Technical Expert** (listed in the corporation expert data base), AT&T Bell Laboratories.

**Invited Speaker**, *Software Productivity and Quality Executive Cabinet Committee*, AT&T Bell Laboratories.

**Invited Speaker**, *Software Practices and Technology Council*, AT&T Bell Laboratories.

**Speaker**, *1990 Modern Engineering and Technology Seminar*, Taiwan.

**Invited Speaker**, Fujitsu Ltd., Japan, 1990.

**Speaker**, *IEEE Communication Society 1990 International Quality Assurance Management Workshop*, May 1990.

**Speaker**, *Information Technology Session, 1990 Chinese Academic and Professional Convention of North America (CAAPCON)*

**Speaker**, *National Communication Forum (NCF '88)*, Chicago, 1988.

**University Lecturer**, *AT&T Technical Exchange Program*

**Reviewer**, *IEEE Software Engineering Standards Committee*

**Reviewer**, *IEEE Parallel & Distributed Technology*

**Reviewer**, *Computer Magazine, IEEE Computer Society*

**Book Reviewer**, *IEEE Computer Society Press*

**Committee**, *ISO/IEC JTC 1/SC7 Software Engineering Technical Advisory Group (TAG)*

## **PROFESSIONAL SOCIETIES:**

### **IEEE Senior Member**

- Vice Chair – Publications, IEEE Communications Society Quality Assurance and Reliability Committee.
- Steering Committee Member, IEEE Communications Society e-Health Technical Committee.
- Past Chair, IEEE Communications Society - Chicago Chapter.
- Committee Member, IEEE Computer Society Software Engineering Standards Committee.
- Senior Member, IEEE Computers Society and IEEE Communications Society.
- Past Board Member, North America Region, IEEE Communications Society.
- ISO/IEC JTC 1/SC7 Software Engineering Technical Advisory Group (TAG) – Former Lucent Technologies delegate (alternate).

### **ACM Member**

- Full Member

## **ACADEMIC GRANTS AWARDED:**

### **National Science Foundation(NSF): 2008-2009 BPC-A Grant**

- Co-Principal Investigator. Award: \$150K, December 2008.
- Topic “Expanding Paths to Computing”.

### **SJSU/COE: 2007 Faculty Development Grant**

- Principal Investigator. Award: \$10K, April 2007.
- Program Categories: Teaching and Research Excellence, Leading-Edge Engineering Programs.
- Topic “Security and Privacy in Wireless Mobile Technology for u-Health Systems”.

### **SJSU: 2006 Faculty Initiative to Support Student Success Fund**

- Principal Investigator. Award: 0.20 release time, November 2006.

### **SJSU/CMPE: 2006 Professional Development Grant**

- Principal Investigator. Award: \$2.5K, February 2006.

### **INTEL: 2005 California Education Grant**

- Senior Personnel. Award: \$44K, February 2005.
- Topic: “Wireless and Internet Technology in Learning Environment”.

**HP: 2004 Applied Mobile Technology Solutions in Learning Environments Grant**

- Co-Principal Investigator. Award: \$112K, April 2004.
- Topic: "Community Based Mobile Technology and Learning Innovations".

**SJSU/CMPE: 2004 Professional Development Grant**

- Principal Investigator. Award: \$2.5K, February 2004.

**HP: 2003 Applied Mobile Technology Solutions in Learning Environments Grant**

- Co-Principal Investigator. Award: \$250K, March 2003.
- Topic: "Problem-Based Learning through Mobile Technology".

**INTEL: 2003 Science and Technology Education Grant**

- Co-Principal Investigator. Award: \$50K, February 2003.
- Topic: "Wireless and Internet Technology in Learning Environment".

**CSU: 2003-2004 Research Grant**

- Principal Investigator. Award: \$5K, May 2003.
- Topic: "Distributed Software Engineering Technology for Problem-Based Learning".

**INDUSTRY SPECIAL SUPPORT:**

**MICROSOFT: 2007 Wireless Mobile Computing Support**

- Principal Investigator. Award: personal mobile computing devices, May 2007.
- Topic: .NET Wireless Mobile Web Based Distributed Software Systems.