

# Resume

**Dr. William W. Everett**

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**Qualification**

- an acknowledged leader in the field of Software Reliability Engineering (SRE).

**Highlights**

- 25+ years experience in developing telecommunications and business software.
- technical expertise in reliability, computer performance analysis, software quality assurance (ISO 9000-3, SEI CMM), process engineering, speech recognition, architecture, software reuse.
- successful in selling ideas and developing people networks to put them into practice. Excellent team building and facilitation skills. Consistently received special performance awards from home and other organizations.

**Recent Talks  
& Publications**

Chapter Co-author, **Software Reliability Engineering Handbook**, McGraw Hill, 1996.  
Guest Editor for two issues of IEEE Software Magazine (May 1995, Nov. 1994).  
Panel Member, "SRE Processes", 1995 Int'l Conf. on Stds. in Software Engineering.  
Article Contributor, **Encyclopedia of Software Engineering**, Wiley, 1994 & 2001.  
Chapter Author, **Software Engineering Productivity Handbook**, McGraw Hill, 1993.  
Co-author, **AT&T Software Reliability Engineering "Best Current Practice"**, 1992.  
Co-author, **AT&T Reliability by Design Handbook**, Jan. 1991.  
Over 30 other papers, articles, chapter contributions on Software Reliability

**Professional  
Activities**

Chair - IEEE Software Reliability Engineering Committee.  
Senior Member, IEEE. Member IEEE Computer, Reliability, Communication Societies.  
Chair – ISSRE (Int'l Symposium on Software Reliability Engineering) Steering Committee  
Past Vice President, IEEE Computer Society Chapters Activities Board  
General Chair – ISSRE97, Finance Chair ISSRE98, ISSRE99.  
Program Committees – ISSRE96 - ISSRE2002.  
Steering Committee and Program Committee – ASSET99, ASSET2000.  
Program Vice Chair - 1996 IEEE ComSac (Computer Software and Applications Conference)  
Past Speaker - IEEE Distinguished Visitors Program (topics on software reliability).  
Past Associate Editor-in-Chief - IEEE Software Magazine.

**Education**

Ph.D. - Applied Mathematics - California Institute of Technology, Pasadena, CA.  
Engineering Degree - Mathematics - Colorado School of Mines, Golden, CO.

**Work  
Experience**

**SPRE, Inc., Software Process & Reliability Engineering, Albuquerque**  
*President and Principal Consultant*  
*1996-Present*

Lead consultant in integrating reliability methods and process improvement changes to produce better software-based products. Lead SRE efforts in testing Commercial Firewall products, a Biometric security application. Principal Investigator on a US AirForce Phase I SBIR involving SRE. Produced a performance/capacity planning model for Access360's Enrole product. Reviewed software development processes for Corning Optical, Cameron Control and AT&T. Finished a prototype product to support automated reliability testing of software for Teradyne Corp and NSA. Taught courses on SRE to Motorola and AT&T staff. Other clients include Dialogic, DataProducts, Educational Testing Services, Science and Engineering Associates, Cummins Engine Company.

**Work  
Experience**

***AT&T Bell Laboratories, Murray Hill, New Jersey.***

*Distinguished Member of Technical Staff*

1993-1996

As a member of the Software Technology Center, consulted with software development organizations across and outside AT&T on software process engineering (i.e., the processes supporting the development of software products) and software development metrics.

- assisted a research organization in moving speech technology from research to product development,
- defined/deployed processes supporting software multi-use,
- assisted PBX business unit in establishing a metrics program and developed a technique allowing them to compare themselves to the rest of software industry.

*Distinguished Member of Technical Staff*

1991-1993

As a member of the Quality Assurance Center, worked with a major business unit in defining a vision of software in their business, extended the practice of software reliability across AT&T.

- worked with Microelectronics business unit in developing a vision of the role of software in their business,
- led a team in defining an AT&T Best Current Practice for doing Software Reliability Engineering (SRE),
- initiated/supported over four trials and jump starts of SRE in organizations across AT&T.

*Distinguished Member of Technical Staff*

1988-1991

As a member of the Kelly Education and Training Center, worked on the technology transfer of SRE through course development and delivery, consulting and “jump start” support.

- initiated and supported over half a dozen “jump starts” across AT&T,
- developed an SRE software toolkit used by projects within and outside AT&T.

*Technical Consultant*

1985-1987

As a member of an organization building telephone network operation support systems,

- provided support in computer performance analysis, reliability and quality assurance.
- introduced significant improvements in product reliability and performance,
- organized and led a quality audit of a major project spanning several organizations,
- initiated an organization-wide inspection/review program.

*Technical Manager*

1982-1985

As a member of the AT&T Bell Labs MIS organization, lead a group in planning corporate computer and communication needs and in proto-typing and introducing new technologies supporting office automation and inter-office communications.

- served as project manager of a \$10M deployment of a corporate LAN network,
- managed a group of 8 to 12 people,
- participated in deployment of corporate office automation system,
- managed exploratory development in new technologies supporting office automation,
- conducted trials within AT&T of first voice-mail systems,
- served as market and college-campus recruiter.

*Member of Technical Staff*

1972-1982

Measured, modeled and analyzed the performance and capacity of software-based system

- developed the physical architecture for a nation-wide telephone service order processing system,
- resized computer needs for New York Telephone to support their billing systems.

***US Army Security Agency, Arlington Hall Station, Washington D.C.***  
*Captain, Data Processing Plans & Operations Officer*

*1970-1971*

As a member of headquarters and general staff, managed a small programming group developing a military command and control system supporting NSA security activities. Contributed to the design and programming of the system. Top Secret with access to Crypto clearance.

## Publications and Talks

- Coauthor, "Best Current Practice of SRE" in **Software Reliability Engineering Handbook**, M. Lyu (Ed.), McGraw Hill, 1996.
- CoAuthor talk and paper, *Reliability Testing of COTS Security-based Software Applications*, International Common Criteria Conference, Ottawa Canada, 14 May 2002
- CoAuthor talk and paper, *Reliability Testing of COTS Security-based Software Applications*, High Confidence Systems&Software Conference, Baltimore MD, 8 March 2002
- CoAuthor talk and paper, *IMPACT: A Tool Supporting Operational Impact Assessments*, Software Technology Conference, Salt Lake City UT, 2 May 200.
- Author talk and paper, *Reliability Testing of COTS Security-based Software Applications*, High Confidence Systems&Software Conference, Baltimore MD, 30 March 2001
- CoAuthor talk and paper, *IMPACT: A Toolkit for Assessing Operational Impacts*, Int'l Test & Evaluation Workshop, Albuquerque NM, 17 October 2000.
- Panel Member, "Managing the Software Development Lifecycle", Int'l Engineering Management Conference, August 2000.
- Panel Member, "Developing the Next Generation IEEE Dependability Standard", Software Technology Conference, May 2000.
- Panel Member, "Everything you wanted to know about SRE but were afraid to ask", ISSRE'98, ISSRE'99, ISSRE'2000, ISSRE'2001, ISSRE'2002, November 1998-2002.
- Panel Member, " Practical Issues in Implementing Software Reliability Measurements", ISSRE'99, November 1999
- Paper, "Modeling Operational Profiles", ISSRE'99, November 1999.
- Member, Panel of Experts, Software Reliability Workshop, sponsored by the NRC and University of Maryland, August 1999.
- Paper, "TestMaster and Managing Software Reliability", Teradyne User's Group Meeting, April 1999.
- Paper, "Software Component Reliability Analysis", ASSET99, March 1999.
- Panel, "Issues in the Next Generation of Dependability Standards", ISSRE98, Nov 1998.
- Paper, "Software Component Reliability Analysis", SRE98 Workshop, August 1998.
- Panel, "Software Reliability and Quality Assurance", ASSET98, March 1998
- Invited Talk, "Analyzing Software Reliability during Test, A New Approach" Automated Software Testing & Evaluation Conference, March, 1997
- Panel Member, "SRE Processes" at International Conference on Standards in Software Engineering, Montreal Canada, August 1995.
- Invited talk, "Software Reliability Engineering" at Speed School of Engineering, University of Louisville, Louisville KY, May 1995.
- Tutorial, "Software Reliability and Testing", at the Sixth Annual AT&T SRE BCP User Group Workshop, Naperville IL, May 1995.
- Panel, "Challenges for Software Reliability Professionals", at the Sixth Annual AT&T SRE BCP User Group Workshop, Naperville IL, May 1995.
- Guest Editor, "Reliability and Safety of Software Systems", in IEEE Software Magazine, May 1995.
- Guest Editor, "Software Beyond 2001: A Global Vision", in IEEE Software Magazine, November 1994.
- Coauthor, "Software Reliability Engineering" in **Encyclopedia of Software Engineering**, Wiley, 1994.
- Coauthor, "Stretching the paradigm for software reliability", in Software Quality Journal, January 1994.
- Paper, "Experiences in Software Process Deployment" at the AT&T Symposium on Process Deployment, June 1994.
- Talk, "The DQS Experience with SRE", at the Fifth Annual AT&T SRE BCP User Group Workshop, Murray Hill NJ, May 1994.
- Invited talk, "Software Reliability for Safety Critical Applications", at the Digital Systems Reliability and Nuclear Safety Workshop sponsored by NIST and the NRC, Gaithersburg MD, September 1993.

## Publications and Talks

- Invited talk, "Software Reliability Engineering", at the Software Engineering Institute (SEI) Pittsburgh PA, November 1993.
- Author, "Software Reliability and Productivity", in **Software Engineering Productivity Handbook**, McGraw Hill, 1993.
- Talk, "Software Reliability Engineering", at the AT&T BCP Symposium, Columbus OH, October 1993.
- Talk, "Software Reliability Engineering Practice", for the North Jersey Section of IEEE, September 1993,
- Talk, "Engineering UltraReliable Software Systems", at the Fourth Annual AT&T SRE BCP User Group Workshop, Murray Hill NJ, June 1993.
- Coauthor, "A Software Reliability Engineering Practice", in IEEE Computer Magazine, March 1993.
- Author, "An Extended Execution Time Software Reliability Model", at the International Symposium on Software Reliability Engineering, October 1992.
- Talk, "Software Reliability Engineering", at the AT&T BCP Symposium, Atlanta GA, September 1992.
- Talk, "SRE Best Current Practice", at the AT&T Reliability Information Forum, Short Hills NJ, October 1992.
- Author, "Reliability Measurement: From Theory to Practice", in IEEE Software Magazine, July 1992.
- Talk, "Status of SRE as a Best Current Practice", at the Third Annual AT&T SRE BCP User Group Workshop, Murray Hill NJ, June 1992.
- Tutorial, "Software Reliability Engineering", at the International Symposium on Software Reliability Engineering, Austin TX, May 1991.
- Coauthor, **Reliability by Design Handbook**, AT&T, January 1991.
- Briefing, "Software Reliability Engineering", for the president of AT&T Consumer Communication Services, April 1991.
- Coauthor, "Software Reliability Engineering - A Technology for the 90's", in IEEE Software Magazine, November 1990.
- Author, "Software Reliability Measurement", in IEEE Journal on Special Applications in Communications, February 1990.
- Talk, "Software Reliability Engineering", AT&T Bell Labs Test Tools User Group, August, 1990
- Talk, "Measuring and Tracking Software Reliability", 8th Annual Software Reliability Symposium, Rocky Mountain Chapter of IEEE Reliability Society, June 1990.
- Panel, "Software Reliability: Theory, Practice and Controversy", ACM/IEEE Symposium on Applied Computing, Fayetteville AK, April 1990.
- Talk, "Applications of Software Reliability Measurement within AT&T", at the American Institute of Aeronautics and Astronautics Workshop on Software Reliability, Houston TX, December 1989.
- Talk, "Software Quality Measures", AT&T Bell Labs Field Forces Conference, Boston MA, September 1989.
- Paper, "Recent Applications of Software Reliability Measurements", at the Reliability and Maintainability Symposium, Atlanta GA, January 1989.
- Talk, "Software Reliability Applied to a Computer-based Operations Support System", at the IEEE Workshop on Telecommunications Software Quality and Productivity, Calloway Gardens GA, April 1988.
- Paper, "Experiences in Applying Software Reliability in Network Operations Systems", at the Annual National Conference and Tutorial on Software Quality and Productivity sponsored by NSIA, Washington DC, March 1988.
- Panel, "Can Software Quality be Measured", at the ACM/IEEE Computer Society Fall Joint Computer Conference, Dallas TX, 1987.
- Talk, "Office Automation at Bell Labs", at the SUNY at Binghamton, October 1981.