

Lloyd G. Williams, Ph.D.

Selected Publications

BOOKS

Performance Solutions: A Practical Guide to Creating Responsive, Scalable Software, Addison-Wesley, Boston, MA, 2002 (with C. U. Smith).

Chapter in Book: "Software Performance Engineering," in *UML for Real: Design of Embedded Real-Time Systems*, Luciano Lavagno, Grant Martin, Bran Selic ed., Kluwer, 2003 (with C. U. Smith).

Chapter in Book: "Performance Prediction Techniques Applied To Electronic Commerce Systems," in *Electronic Commerce Technology Trends: Challenges and Opportunities*, IBM Press , 2000. (with K. C. Sevcik and C. U. Smith).

Chapter in Book: "Performance Engineering Evaluation of CORBA-based Distributed Systems with *SPEED*," in *Computer Performance Evaluation, Lecture Notes in Computer Science*, vol. 1469, R. Puigjaner, N. N. Savino and B. Serra, ed., Berlin, Springer-Verlag, 1998, pp. 321-335. (with C. U. Smith)

Chapter in Book: "Performance Engineering Evaluation of Object-Oriented Systems with *SPE•ED™*," in *Computer Performance Evaluation*, R. Marie, B Plateau, M. Calzarossa, and G. Rubino, eds., *Lecture Notes in Computer Science*, vol. 1245, Heidelberg, Springer-Verlag, 1997, pp. 135-154. (with C. U. Smith)

Chapter in Book: "Information Requirements for Software Performance Engineering," in *Quantitative Evaluation of Computing and Communication Systems*, H. Beilner and F. Bause, eds., *Lecture Notes in Computer Science*, vol. 977, Heidelberg, Springer-Verlag, 1995, pp. 86-101. (with C. U. Smith)

Chapter in Book: "Software Reuse" in *Aerospace Software Engineering*, C. Anderson and M. Dorfman, eds., AIAA Progress Series, American Institute of Aeromautics and Astronautics, 1991.

PUBLICATIONS

"Software Performance Engineering: A Tutorial Introduction," *Proceedings of the Computer Measurement Group*, San Diego, December, 2007 (with C. U. Smith), to appear.

"Five Steps to Establish Software Performance Engineering in Your Organization," *Proceedings of the Computer Measurement Group*, Reno, December, 2006 (with C. U. Smith).

"QSEMSM: Quantitative Scalability Evaluation Method," *Proceedings of the Computer Measurement Group*, Orlando, December, 2005 (with C. U. Smith).

"Web Application Scalability: A Model-Based Approach," *Proceedings of the Computer Measurement Group*, Las Vegas, December, 2004 (with C. U. Smith).

"Making The Business Case for Software Performance Engineering," *Proceedings of the Computer Measurement Group*, Dallas, December, 2003 (with C. U. Smith).

- “Best Practices for Software Performance Engineering,” *Proceedings of the Computer Measurement Group*, Dallas, December, 2003 (with C. U. Smith).
- “More New Software Performance Antipatterns: Even More Ways to Shoot Yourself in the Foot,” *Proceedings of the Computer Measurement Group*, Dallas, December, 2003 (with C. U. Smith).
- “PASASM: An Architectural Approach to Fixing Software Problems,” *Proceedings of the Computer Measurement Group*, Reno, December, 2002 (with C. U. Smith).
- “New Software Performance Antipatterns, More Ways to Shoot Yourself in the Foot,” *Proceedings of the Computer Measurement Group*, Reno, December 2002 (with C. U. Smith).
- “PASASM: A Method for the Performance Assessment of Software Architectures,” *Proceedings of the Workshop on Software and Performance (WOSP 2002)*, Rome, July 2002 (with C. U. Smith).
- “Software Performance AntiPatterns: Common Performance Problems and Their Solutions,” *Proceedings of the Computer Measurement Group*, Anaheim, December 2001 (with C. U. Smith).
- “Building Responsive and Scalable Web Applications,” *Proceedings of the Computer Measurement Group, Orlando*, December 2000 (with C. U. Smith).
- “Software Performance AntiPatterns,” *Proc. 2nd Int. Workshop on Software and Performance*, Ottawa, September 2000 (with C. U. Smith).
- “A Performance Model Interchange Format,” *Journal of Systems and Software*, 49, 1, 1999. (with C. U. Smith)
- “Performance Evaluation of a Distributed Software Architecture,” *Proc. CMG*, Anaheim, December 1998 (with C. U. Smith).
- “Performance Engineering Evaluation of CORBA-based Distributed Systems with SPE•ED,” *Proc. CMG*, Anaheim, December 1998 (with C. U. Smith).
- “Performance Evaluation of Software Architectures,” *Proceedings of the Workshop on Software and Performance*, Santa Fe, NM, October, 1998. (with C. U. Smith)
- “Beyond Object-Oriented Development,” *Human-Computer Interaction*, vol. 10, no. 1, pp. 79-119, 1995. (with Gerhard Fischer, David Redmiles, Gretchen Puhr, Atsushi Aoki, and Kumiyo Nakakoji)
- “Assessment of Safety-Critical Specifications,” *IEEE Software*, vol. 11, no. 1, pp. 51-60, 1994.
- “Software Performance Engineering: A Case Study Including Performance Comparison with Design Alternatives,” *IEEE Transactions on Software Engineering*, vol. 19, no. 7, pp. 720-741, 1993. (with C. U. Smith)
- “Using Object-Oriented Development to Support Prototyping,” *Proceedings of the Twelfth International Conference on Software Engineering*, Nice, France, March 1990, pp. 129-132. (also available as Technical Report No. SERM-011-89, Software Engineering Research, Boulder, CO, July 1989) (with L. Zucconi and G. Mack)

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- “Software Process Modeling: A Behavioral Approach,” *Proceedings of the Tenth International Conference on Software Engineering*, Singapore, April 1988, pp. 174-186.
- “SDA: A Novel Approach to Software Environment Design and Construction,” *Proceedings of the Tenth International Conference on Software Engineering*, Singapore, April 1988, pp. 69-79. (with K. Kishida, T. Katayama, M. Matsuo, I. Miyamoto, K. Ochimizu, N. Saito, J. H. Saylor, and K. Torii)
- “Technology Selection: An Educational Approach,” *IEEE Transactions on Software Engineering*, vol. SE-13, no. 11, pp. 1199-1206, 1987. (with W. E. Riddle)