

## Publications

### *Yahoo! Internal Publications and Presentations*

Grid Performance Improvement Techniques, with Robert Parker, Krishna Appadurai, Harvey Chong III, Robert Evans, Ross Bundy, and Haley Thrapp, Yahoo! Tech Pulse 2010, Santa Clara, CA, 2010.

Building your First Categorizer on the Grid, with Bobby Evans, Rob Parker, Ross Bundy, Yahoo! TechPulse 2009, San Jose, CA, 2009.

Platform for Grid-based Categorizer Training, with Bobby Evans, Ross Bundy, Rob Parker, Yahoo! TechPulse 2009, San Jose, CA, 2009.

The [Formerly Known as DataOS] Categorization Platform, presented at Yahoo! Machine-Learning PowWow, 2008.

DataOS Categorization Platform, with Dave Burgess, Yahoo! TechPulse 2008, San Jose, CA, 2008.

Categorization Platform Tech Talk, presented to APG Architecture Group, August 2009.

DataOS Categorization Platform, with Dave Burgess, presented to SDS architecture team.

### *External Technical Papers and Presentations*

A Spreading Activation Network Model for Information Retrieval, Ph.D. Thesis. Dept. of Computer Science, University of Illinois at Urbana-Champaign, Urbana, Illinois, 1981. *Available for purchase from <http://www.umi.com>.*

An Online Associative Query Modification Methodology, *Online Review* 4 (4), 375-382, 1980.

Process-modeling retrieval interfaces, *Proceedings of the American Society for Information Science Annual Meeting* 18, 1981, Washington, D.C., pp. 274-275.

Associative searching by spreading activation, *Proceedings of the American Society for Information Science Annual Meeting* 18, 1981, Washington, D.C., pp. 331-332.

A Mini-Transparent System Using an Alpha Microprocessor, with Williams, M.E., *Proceedings of the Second National Online Meeting* March 24-26, 1981, Martha E. Williams and Thomas H. Hogan, comps., Learned Information, Inc., Medford, NJ, 1981, pp. 499-502. (ISBN: 0-938734-02-4)

Software for the Searcher's Workbench, with Williams, M. E., *Proceedings of the American Society for Information Science Annual Meeting* 17, 1980, Anaheim, CA. Knowledge Industry Publications, Inc., White Plains, N.Y., 1980, pp. 403-405. (ISBN: 0-914236-73-3)

Elements of A Distributed Transparent Information Retrieval System, with Williams, M. E., *Proceedings of the American Society for Information Science Annual Meeting* 17, 1980, Anaheim, CA. Knowledge Industry Publications, Inc., White Plains, N.Y., 1980, pp. 401-402. (ISBN: 0-914236-73-3)

Summary Statistics for Five Years of the MARC Database, with Williams, M. E., and Barth, S. W. *Journal of Library Automation*, 12 (4), December 1979, pp. 314-377.

Data Base Statistics for 1977, with Williams, M.E. and Lannom, L., Final Report on NSF Grant No. SP 77-0986, CSL Report No. T-76, Information Retrieval Research Laboratory, Coordinated Science Laboratory, University of Illinois, Urbana, IL, 1979, 47 pp.

A hybrid framework for natural language processing of large data bases, with Williams, M.E., *ACM SIGART Bulletin*, 61, February 1977, doi>10.1145/1045283.1045330. *Available at <http://portal.acm.org/citation.cfm?id=1045330>.*

EARL: Implementing the Entity-Relationship Model, with Williams, M. E., *Proceedings of the American Society for Information Science Annual Meeting* 14, 1977, Chicago, IL. Knowledge Industry Publications, Inc., White Plains, N.Y., 1977. (Fiche No. 7A-1).

Data Base Selector for Network Use, with Williams, M. E., *Proceedings of the American Society for Information Science Annual Meeting* 14, 1977, Chicago, IL. Knowledge Industry Publications, Inc., White Plains, N.Y., 1977. (Fiche No. 10-C13).

Data Element Analysis and Use of a Relational Data Base Structure for Mapping Bibliographic and

Numeric Data Bases, with Williams, M. E. and Rouse, S. H., *Proceedings of Second Symposium on Management of Data Elements in Information Processing*, National Bureau of Standards, Gaithersberg, Maryland, 1976, pp. 237-252.

Design for a Modular Query Pre-processor System, *Proceedings of the American Society for Information Science Annual Meeting 11*, 1974, Atlanta, GA, p125.

Use of Hierarchic Clustering in Forming a Similarity Measure, *Proceedings of the Twelfth Allerton Conference on Circuit and Switching Theory*, 1974, Monticello, IL, p502.

Clustering as an Output Option, *Proceedings of the American Society for Information Science Annual Meeting 10*, 1973, Los Angeles, CA, p189.

Real-Time Capabilities in UTX/32 (Half-day tutorial), Gould Users Group, 1987, Fort Lauderdale, FL.

Minimalist Physical Memory Control in UNIX, with Mark Holderbaugh, *Proceedings of the USENIX Technical Meeting*, 1989, Los Angeles, CA.

Multiprogramming Support in UNIX, MCG Technical Ladder Conference and BUSCON, 1994, Boston, MA.

Object-Based Re-engineering of the 88000 Software Emulator, MCG Technical Ladder Conference, 1993.

The Role of Design in the MCG Software Development Process, MCG Technical Ladder Conference, 1994.

Design and Estimation with Reuse, MCG Technical Ladder Conference, 1995

Reuse-Oriented Design in Object-Oriented Development: A Case Study, MCG Technical Ladder Conference, 1996.

Using Scenario-Based Software Architecture Evaluation, Motorola Software Engineering Symposium, 1999, Fort Lauderdale, FL.

Collaboration and Communication at Motorola, presentation to University of Illinois Extension, 2001

Software Reviews at Motorola, presentation to CS course at University of Illinois

Crossing the Chasm, panel at Software Product Lines Conference, 2002, San Diego, CA

New Product Development at Motorola, presentation to joint Business College/Art and Design course at University of Illinois, 2005, 2006

The MPPWG API and Reference Architecture – Overview, CE Linux Forum Embedded Linux Conference, 2006, Santa Clara, CA

The Mobile-Phone Domain and CELF, CE Linux Forum Embedded Linux Conference, 2007, Santa Clara, CA

### ***Motorola Internal Publications and Presentations***

Guidelines and Practice for Using SDL (UDC Development document)

SET Software Reuse Handbook (SET document, team authorship)

Overview of Domain Engineering and Reuse (SET document)

Domain Engineering and Reuse Glossary (SET document)

Capabilities and Activities of Domain Engineering (SET document)

MCG Design Description template, Guidelines, and review checklist (division process)

MPS Development Team Policy and Procedures Manual (UDC Development document)

Overview of the UIS Dialogs (colloquium)

Applying Scenario-Based Software Architecture Evaluation Methods (white paper)

The Synergy Software Requirements Definition Language [SRDL] (white paper)

Writing Software Requirements as a Testable Model (Subscriber Testing Symposium)

Formalizing the Synergy Requirements (colloquium)

Getting to 100x Cycle Time Improvement in Software Development (colloquium)  
The Synergy Application-Layer Architecture (colloquium)  
The Synergy software architecture (SABA presentation)