VITA

Roger E. Eggen

Home
11450 Sedgemoore Dr. W.
Jacksonville, FL 32223

Office
Department of CIS
CCEC
University of North Florida
Jacksonville, FL 32224

(904) 710-5864
(904) 620-1326

EDUCATIONAL BACKGROUND:

1982 - 1986 Ph.D. - Computer Science
University of Missouri - Rolla.
Dissertation title: A Semantic Basis for Parallel Algorithm Design.

1975 - 1977 M.S. - Computer Science
University of Nebraska - Lincoln.

1965 - 1969 B.S. - Mathematics and Physics
Northern Montana College, Havre, Montana.

SCHOLARSHIP:

Komathukattil, D., Eggen, R., Ahua, S., and Seyed-Abbassi, B., "Performance Measures of an Implementation of a Parallel Compiler" The 2013 International Conference on Computer Design (CDES'13), July 2013

Eggen, R.,Rumancik, S.and Eggen, M. "C, JAVA, RUBY: A Student Experience" The 12th International Conference on Computers and Advanced Technology in Education (CATE 2009), November 2009

Eggen, M., Starche, A. and Eggen, R. "A Functional Approach to Parallelism and Distributed Processing in Undergraduate Education" Proceedings of the 11thIASTED International Conference on Computers and Advanced Technology in Education (CATE 2008),October 2008.

Eggen, R., Jones, C., and Eggen, M. "Ruby, PHP, Perl, Python: A Web Efficiency Comparison," The 2008 International Conference on Internet Computing (ICOMP'08),July 2008.

Eggen, R., and Eggen, M. "Ruby versus PHP: A Comparative Study of Performance for Distributed Processing," The 2007 International Conference on Parallel and Distributed Processing Techniques nd Applications (PDPTA'07)June 2007

Starche, A., Eggen, M., and Eggen, R., "MPSCM: A Message Passing Interface for Scheme," The 2007 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'07)June 2007

Blajian, G.,Eggen, R., and Eggen, M. "Mono versus .net: A Comparative Study of Performance for Distributed Processing." *2006 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2006)*, June 2006**.**

Eggen, M. and Eggen, R. A Parallelism and Distributed Computing in Undergraduate Education.@ *The Ninth International Conference on Computers and Advanced Technology in Education (CATE 2006),* October 2006.

Eggen, R. and Eggen, M. AAdvantages of Directed Independent Studies.@ *The Eighth International Conference on Computers and Advanced Technology in Education (CATE 2005),* August 2005.

Eggen, R. and Basic, A. AEfficiency of Web based SAX XML Distributed Processing.@ *The 2005 International Workshop on XML Technology (XML Tech'05),* June 2005.

Eggen, R. Ahuja, S. Elliott, P and Eggen, M. AEfficiency Considerations Between Common WEB Applications using the SOAP Protocol.@ *The 2004 International Conference Communications, Internet, and Information Technology (CIIT 2004),* November 2004.

Ahuja, S., Eggen, R. and Chaudhry, S. AOn the Performance Evaluation of a Campus LAN.@ *The 8th World Multiconference on Systemics, Cybernetics and Informatics (SCI 2004),* July 2004.

Eggen, R. Ahuja, S. and Waters, C. ARMI, JINI, and JavaSpaces: An Efficiency Comparison.@ *The 2004 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'04),* June 2004.

Ahuja, S., Clark, R., Eggen, R. and Elfayoumy, S. APerformance Assessment of Open Source Java Based CORBA ORBs.@ *The 2004 International Conference on Internet Computing (IC'04),* June 2004.

Eggen, R. and Eggen, M. AEfficiency Considerations of PERL and Python in Distributed Processing.@ *The 2004 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'04),* June 2004.

Eggen, R. and Sunku, S. ΑEfficiency of Soap versus JMS.@ *The 2003 International Conference on Internet Computing (IC'03),* June 2003.

Eggen, R. and Mitchell, J. ΑPerformance Comparison Between Commercial Implementations of Relation Data Storage and Tuple Storage.@ *The 2003 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'03),* June 2003.

Ahuja, S., Eggen, R. and Daucher, C. ΑPerformance Evaluation of Java and C++ Distributed Applications in a CORBA Environment.@ *International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS 2002),* July 2002.

Eggen, R., Gwizdak, S. and Eggen, M. ΑSOAP and XML as Parallel Distributed Environments: An Empirical Cost/Benefit Evaluation.@ *2002 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2002)*, June 2002.

Eggen, M., Franklin, N. and Eggen, R. ΑLoad Balancing on a Non-dedicated Heterogeneous Network of Workstations.@ *2002 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2002)*, June 2002.

Eggen, R. and Eggen, M. ΑAn Empirical Study of Efficiency in Distributed Parallel Processing.@ *2001 International Conference on Parallel and Distributed Computing and Systems (PDCS 2001)*, August 2001**.**
Eggen, R. and Eggen, M. ΑEfficiency of Distributed Parallel Processing Using Java RMI, Sockets, and CORBA.@ *2001 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2001)*, June 2001**.**

Eggen, R. and Eggen, M. ΑEfficiency of Parallel Java Using SMP and Client-Server.@ *2000 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2000)*, June 2000.

Eggen, R. and Eggen, M. ΑJava versus MPI in a Distributed Environment.@ *1999 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 1999)*, June 1999.

Eggen, R. and Eggen, M. ΑA Comparison of the Capabilities of PVM, MPI and JAVA for Distributed Parallel Processing.@ *1998 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 1998)*, July 1998.

Eggen, R. ΑKey Addressable Storage.@ *Proceedings of the 36th Annual Association for Computing Machinery Southeast Conference*, April 1998, pp 189-193.

Eggen, R. and Shields, D. ᴀBit Trees.@ *The Journal of Computing in Small Colleges*, April 1997, pp 105-113.

Eggen, R. and Eggen, M. ᴀComputer Assisted Grading.@ *The Journal of Computing in Small Colleges*, November 1996, pp 310-321.

Flynn, D. and Eggen, R. ᴀExact Coloring Algorithm for Composite Graphs with a Parallel Implementation.@ *Proceedings of the 32nd Annual Southeast Conference*, March 1994, pp 219-226.

Eggen, R. and Kurak, C. ᴀPattern Matching in Fewer Comparisons.@ *Procdings of IEEE Southeast CON 1992*, April 12-15, 1992, pp 410-412.

Eggen, R. and Sandberg, W. ᴀConceptual Processes for Computability Theory.@ *Proceedings 29th Annual Southeast Regional Conference ACM*, April 10-12, 1991, pp 209-213.

Eggen, R. and Eggen, M. ᴀA Parallel Algorithm for Steiner Systems.@ *Proceedings 28th Annual Southeast Regional Conference ACM*, April 18-20, 1990, pp 165-168.

Eggen, M. and Eggen, R. ᴀEfficient Computer Algorithms for Construction of Triple Systems.@ *Twenty-First Southeastern International Conference On Combinatorics, Graph Theory and Computing*, An abstract, February 12-16, 1990, pp 153.

Eggen, R. ᴀA Message Based Operating System Promoting Parallel Programming.@ *Proceedings of IEEE Southeast CON 1989*, April 9-12, 1989, pp 500-504.

Eggen, R. ᴀA Parallel Implementation of Depth First Search.@ *Proceedings of the Florida Artificial Intelligence Research Symposium*, April 3-7, 1989, pp 19-23.
Butler, R., Eggen, R. and Wallace, S. ᴀBeyond Vectors - Parallelism for Other Algorithms.@ *Proceedings of IEEE Southeast CON 1988*, April 9-13, 1988, pp 112-116.

Eggen, R. and Metzner, J. ᴀAn Inherently Parallel Large Grained Data Flow Environment.@ *ACM Sixteenth Annual National Computer Science Conference*, Feb. 23-25, 1988, pp 551-557.

Butler, R., Eggen, R. and Wallace, S. ᴀIntroducing Parallel Processing at the Undergraduate Level.@*SIGCSE Bulletin*, Feb. 25-26, 1988, Vol. 20, No. 1, pp 63-67.

Eggen, R. and Metzner, J. ᴀA Semantic Basis for Parallel Algorithm Design.@ *Ph. D. dissertation at University of Missouri - Rolla*, 1986.

BOOK:

9 - 4 Vita ʙ Eggen

Eggen, R., and Eggen, M. *An Introduction to Computer Science Using C*. PWS Publishing Company, 1994. (In its third printing)

PRESENTATIONS:

Eggen, R. and Eggen, M. AAdvantages of Directed Independent Studies.@ *The Eighth International Conference on Computers and Advanced Technology in Education (CATE 2005),* August 2005.

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Eggen, R. ASOAP and XML as Parallel Distributed Environments: An Empirical Cost/Benefit Evaluation.@ A presentation to the 2002 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2002), Las Vegas, NV, June 2002.

Eggen, R. AAn Empirical Study of Efficiency in Distributed Parallel Processing.@ A presentation to the 2001 International Conference on Parallel and Distributed Computing and Systems (PDCS 2001), Anaheim, CA, August 2001**.**

Eggen, R. AEfficiency of Distributed Parallel Processing using Java RMI, Sockets, and CORBA.@ A presentation to the 2001 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2001), Las Vegas, NV, June 2001.

Eggen, R. AEfficiency of Parallel Java Using SMP and Client-Server.@ A presentation to the 2000 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2000), Las Vegas, NV, June 2000.

Eggen, R. AJava versus MPI in a Distributed Environment.@ A presentation to the 1999 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 1999), Las Vegas, NV, June 1999.
Eggen, R. AA Comparison of the Capabilities of PVM, MPI and JAVA for Distributed Parallel Processing.@ A presentation to the 1998 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA1998), Las Vegas, NV, July 13, 1998.

Eggen, R. AKey Addressable Storage.@ A presentation to the 36th Annual Association for Computing Machinery Southeast Conference, Marietta, GA, April 12, 1998.

Eggen, R. ABit Trees.@ A presentation to the South-Central CCSC conference, San Antonio, TX, April 11, 1997.

Eggen, R. APattern Matching in Fewer Comparisons.@ A presentation to the Southeast regional IEEE conference, Birmingham, AL, April 14, 1992.

Eggen, R. AA Parallel Algorithm for Steiner Systems.@ A presentation to the ACM Southeast Regional Conference, Greeneville, SC, 1990.

Eggen, R. AEfficient Computer Algorithms for Construction of Triple Systems.@ A presentation to the Twenty-First Southeastern International Conference on Combinatorics, Graph Theory and Computing, Boca Raton, FL, 1990.

Eggen, R. AA Message Based Operating System Promoting Parallel Programming.@ A presentation to the Southeastcon Conference, Columbia, SC, 1989.

Eggen, R. AA Parallel Implementation of Depth First Search.@ A presentation to the FLAIRS Conference, Orlando, FL, 1989.

Eggen, R. AAn Inherently Parallel Large Grained Data Flow Environment.@ A presentation to the ACM Sixteenth Annual National Computer Science, Atlanta, GA, 1988.

Eggen, R. AIntroducing Parallel Processing at the Undergraduate Level.@ A presentation to SIGCSE, Atlanta, GA, 1988.

Eggen, R. ADevelopment of a Parallel Algorithmic Language.@ A presentation to ACM Thirteenth Annual National Computer Science Conference, New Orleans, LA, 1985.

GRANTS:

Eggen, R. 2006, AInsure@ $54,000, Parasoft Corporation .

Eggen, R. 2004, AInsure@ $54,000, Parasoft Corporation .

Eggen, R. 2002, GigaSpaces $1,500, GigaSpaces Corporation.

Eggen, R. 2002, AInsure,@ AJtest,@ and ACodewizard@ $1,100,000, Parasoft Corporation .

Klostermeyer, W., Eggen, R., Chua, Y. and Martin, K., 2001,ATrustees Grant@ $10,000 University of North Florida Trustee Initiative.

Eggen, R. 2000, AInsure,@ AJtest,@ and ACodewizard@ $1.050,000, Parasoft Corporation.

Eggen, R. 1998, AInsure@ and AJTest@ $80,000.00, Parasoft Corporation.

Eggen, R. 1997, AInsure@ and ACodewizard@ $80,000.00, Parasoft Corporation.

Eggen, R. 1997, ADevelopment of a Debugging Tool@ $5000.00, UNF Incorporating Technology in the Classroom.

Eggen, R. 1992, AAion Development System@ $8500.00, Aion Corporation.

Eggen, R. 1991, AParallel Programming Made Easier Through Visualization@ $2445.00, UNF TSI Seed research.

Eggen, R. 1991, ADevelopment of a Robotics Course@ $1500.00, UNF Faculty Development.

Eggen, R. 1983-1985, AAMOCO Research Fellowship,@ $30,000 plus tuition, AMOCO
Corporation.

Eggen, R. Summer 1973, ANational Science Foundation Grant,@ Louisiana State
University - Baton Rouge.

EXPERIENCE:

Professor: 2003 to present,
University of North Florida.

Associate Professor: 1992 to 2003,
University of North Florida.

Assistant Professor: 1986 to 1992,
University of North Florida,
College of Computing, Engineering and Construction
Department of Computer and Information Sciences.
Courses: Programming Language Design Paradigms, Artificial Intelligence,
Compilers, Computational Structures, Computability and Automata,
Analysis of Algorithms, Operating Systems, IBM JCL, Introduction to
Computer Science, Data Structures, Introduction to Information Sciences,
Decision Software for Management, Abstract Machine Simulation,
Seminar, ADA System Development, Software Engineering..

Teaching Assistant: August, 1985 to May, 1986,
University of Missouri - Rolla,
Department of Computer Science.
Courses: Data Structures II, Data Structures I.

Research Fellowship: August, 1982 to June, 1985,
University of Missouri - Rolla.
AMOCO Foundation Doctoral Fellow.

Instructor: August, 1980 to June, 1982,
Southwest Missouri State University - Springfield,
Department of Computer Science.
Courses: PL/I, FORTRAN, BASIC, Data Structures, Operating Systems,
Computer Applications, Survey of Languages, 370 Assembler Language.

Assistant Professor: November, 1979 to May, 1980,
Dakota State College - Madison, South Dakota,
Department of Business (Data Processing).

Courses: COBOL, COBOL Applications, PL/I, FORTRAN, IBM Job Control
Language, IBM System Utilities, Practicum, RPG II, Intro
to Data Proc.

Consultant: May, 1978 to November, 1979,
University of Nebraska - Lincoln, Computer Center.
Responsibilities: Supervising and assisting student consultants, organizing and
teaching short courses, general computer assistance.

Instructor: August, 1977 to May, 1978,
University of Nebraska - Lincoln,
Department of Computer Science.
Courses: Intro to FORTRAN for Bus., Adv. FORTRAN, Intro to CS, Dis. Struct.

Teaching Assistant: July, 1975 to July, 1977,
University of Nebraska - Lincoln,
Departments of Mathematics and Computer Science.
Courses: Calculus, Data Structures, PL/I, and IBM 360 Assembler Language.

High School Math Instructor: August, 1969 to June, 1975,
Malta High School, Malta, Montana.
Courses: Trigonometry, Calculus, Algebra II and Algebra I.

AREAS OF INTEREST:

Parallel processing, programming languages, algorithms, theory of computation, language
translation.

HONORS & PROFESSIONAL ORGANIZATIONS:

Outstanding Undergraduate Teaching Award, 2002
Out-of-Cycle Merit Program, 2000
Teaching Incentive Program, 1994
Member of IEEE Computer Society, 1985 - Present.
Member of the Missouri Academy of Sciences, 1984 - Present.
Member of the Association of Computing Machinery, 1979 - Present.
Member of Upsilon Pi Epsilon, 1976 - Present.
Graduated from Northern Montana College with Departmental Distinction, 1969.
Elected to Who's Who in American Colleges and Universities, 1969.

Vice-President of the Associated Students of Northern Montana College, 1968.
Northern Montana College Honor Scholarships, 1966-1969.
Northern Montana College Math-Science Scholarship, 1966.