

Prof. Daniel J. Buehrer,
Institute of Computer Science and Info. Engr.,
National Chung Cheng University

Journals:

- J01 1985 C.Y. Tang, D.J. Buehrer, R.C.T. Lee "On the Complexity of Some Multiple-Attribute File Design Problems", Information Systems, Vol. 10, No. 1, Pergamon Press Ltd., 21-25.
- J02 1990 D.J. Buehrer, "A Support Environment for High-Quality Reusable Entities", Journal of Computers , Vol. 2, No. 4, (Winter 1990), pp.12-18.
- J03 1991 D.J. Buehrer, "An Introduction to X-Windows", Information and Education (Chinese), No. 2, pp.1-5.
- J04 1991 C.C. Chang, S.M. Hwang, D.J. Buehrer, "A Shape Recognition Scheme Based on the Relative Distances of Feature Points from the Centroid", Pattern Recognition, Vol. 24, No. 11, pp.1053-1063.
- J05 1992 C.C. Chang and D.J. Buehrer, "A Survey of Some Spatial Match Query Algorithms", Database Systems for Advanced Applications '91, Advanced Database Research and Development Series, Vol. 2, (Won Kim and Y. Kambayashi, eds.), World Scientific Publishing Co., pp.218-223.
- J06 1992 C.C. Chang, D.J. Buehrer, S.J. Hwang, J.Y. Diay, "Sharing a Circular Storage for Multiple Stacks", Journal of the Chinese Institute of Engineers , Vol. 15, No. 2, pp.115-121.
- J07 1992 C.C. Chang and D.J. Buehrer, "De-Clustering Image Databases", Future Databases '92, Advanced Database Research and Development Series Vol. 3 , (W.Kim and Y. Kambayashi, eds.), World Scientific Publishing Co., pp.142-145.
- J08 1993 C.C. Chang, Chun-Shien Lu, D.J. Buehrer, "A Chinese Seal Imprint Recognition Scheme", Computer Processing of Chinese and Oriental Languages, Vol. 7, No. 1, June 1993, pp.111-124.
- J09 1994 C.C. Chang, Yaw-Wen Chen, D.J. Buehrer, "A Two-Dimensional Shape Recognition Scheme Based on Principal Component Analysis", International Journal of Pattern Recognition and Artificial Intelligence, Vol. 8, No. 4, World Scientific

Publishing

Co. Pte., Singapore, pp.859-875. (43 citations – ISI Web of Science)

· J10 1993 D.J. Buehrer and C.C. Chang, "Application of a Reciprocal Confluence Unit to

Similar-Picture Retrieval", Advances in Spatial Databases, Lecture Notes in Computer Science 692, (David Able and Beng Chin Ooi, eds.), Springer Verlag, Berlin, 1993, pp.437-442.

· J11 1993 Wen-Long Gau, D.J. Buehrer, "Vague Sets", IEEE Transactions on Systems, Man, and Cybernetics , Vol. 23, No. 2, pp.610-614. (237 citations – Scopus)

· J12 1993 C.C. Chang and D.J. Buehrer, "Access Control in a Hierarchy Using a One-Way Trap-Door Function", Computer and Mathematics with Applications, Vol. 26, No. 5, Pergamon Press, Oxford, 1993, pp.71-76. (15 citations – ISI Web of Science)

· J13 1994 D.J. Buehrer and Fu-Ren Lin, "Unification Without Occurs Check on a Cellular

Tree", Journal of the Chinese Institute of Engineers , Vol. 17, No. 2, (March 1994), pp.229-240.

· J14 1994 C.C. Chang, Shin-Jia Hwang, D.J. Buehrer, "New Concepts for Multiple Stack

Systems: Born and Reborn", Fall, 1994, The Journal of Systems and Software, Elsevier Science Publishing Co.

· J15 1994 D.J. Buehrer, "Soft Computing in Artificial Intelligence: Uses and Future Prospects", Journal of Da-Yeh Inst. of Technology, Vol.. 3, No. 1, pp.11-19.

· J16 1992 C.C. Liu, C.C. Chang, D.J. Buehrer, "Encoding and Accessing Chinese Words

Using Mandarin Phonetic Symbols," Computer Processing of Chinese and Oriental Languages, Vol. 6, No. 2, Dec. 1992, pp. 195-204.

· J17 1994 C.C. Chang, J.K. Jan, and D.J. Buehrer, "A Scheme to Determine the Relationship between Two Users in a Hierarchy", Computers and Security, No. 13, Elsevier Science, Oxford, England pp.255-261.

· J18 1994 D.J. Buehrer and Fu-Jen Lin, "Parallel Unification on a Polymorphic Torus", Journal of the Chinese Institute of Engineers, Vol. 1, No. 4. pp.225-245.

· J19 1995 Hwu Ming-Jinn and D.J. Buehrer, "An Improved Scheme for Effective Execution of Nested Loops with Irregular Dependence Constraints," Journal of the

Chinese Institute of Engineers, Vol. 2, No. 2, pp.107-118.

· J20 1996 D.J. Buehrer and Y.W. Fan, "SL-Trees: An Indexing Structure for Object-Oriented Databases", The Journal of Systems and Software, Elsevier Science Inc., Vol. 32, pp. 237-249, 1996.

· J21 1995 C.C. Chang, W.J. Horng, and D.J. Buehrer, "A Cascade Exponentiation Evaluation Scheme Based on the Lempel-Ziv-Welch Compression Algorithm, Journal of

Information Science and Engineering, No. 11, pp.417-431.

· J22 1996 D.J. Buehrer, C.C. Chang, S.M. Ling, "Using 2D-String Decision Trees for Symbolic Picture Retrieval", Chapter 10 in Intelligent Image Database Systems; Spatial Reasoning, Image Indexing and Retrieval Using Symbolic Projections, edited by S.K. Chang, E. Jungert, and G. Tortora, World Scientific Publishing Co., 1996.

· J23 1996 C.C. Chang, H.C. Kowng, and D.J. Buehrer, "An Improvement to Ziegler's Sparse Matrix Compression Algorithm," Journal of Systems and Software , North Holland, Elsevier Sciences, Inc., Vol. 35, No. 1, pp.67-71.

· J24 1994 C.C. Chang, F.Y. Liou, D.J. Buehrer, "A Practical Database Encryption System", Journal of Computers, Vol.6, No. 3, pp.1-6.

· J25 1997 C.C. Chang, J.H. Jiang, D.J. Buehrer, "A New Method for Temporal Join Using a Priority Search Tree", Intl. Journal of Info. and Management Sciences, Vol. 8, No. 3, pp.1-13.

· J26 2000 D.J. Buehrer, C.S. Lu, and C.C. Chang, "A Shape Recognition Scheme Based on Real-Valued Boundary Points", Tamkang Journal of Science and Engineering, Vol. 3, No. 1, pp.55-74.

· J27 2001 D.J. Buehrer, ["Organizing Multimedia Objects Using a Class Algebra Database"](#), [Distributed Multimedia Databases: Techniques and Applications](#), Timothy K.

Shih (ed.), Idea Group Publishing, Hershey, Pennsylvania, Chapter 20, pp.318-326.

· J28 D. J. Buehrer, Lo Tse-Wen, Hsieh Chih-Ming, ["Abia Cadabia: A Distributed, Intelligent Database Architecture"](#), [Intelligent Multimedia, Computing, and Communications](#), (Mahbubur Syed and Orlando Baiocchi, Eds.), John Wiley and Sons,

New York, 2001. Contains ICIMADE'01 Proceedings, Fargo, North Dakota, June 1-3, 2001, pp.96-101.

· J29 D. J. Buehrer, Lo Tse-Wen, Hsieh Chih-Ming, Maxwell Hou, "[The Containment Problem for Fuzzy Class Algebra](#)", [Intelligent Engineering Systems through Artificial Neural Networks](#), Volume 11, C. H. Dagli et al. (eds.), ASME Press, New York, 2001, pp.279-284.

· J30 Li-Ren Chien and Daniel J. Buehrer, "Using a Typed Mind Map as a Data Model in a TDD DICE System", [Journal of Computer and Information Technology \(CIT 16\)](#), 2008, No. 4, pp. 345-354.

· J31 Chi-Nan Lin, **Daniel J. Buehrer**, Chin-Chen Chang, Tzu-Chuen Lu, [Using quad smoothness to efficiently control capacity-distortion of reversible data hiding](#), [Journal of Systems and Software - JSS](#), vol. 83, no. 10, pp. 1805-1812, 2010.

· J32 **Daniel J. Buehrer** and Chun-Yao Wang, Deco: A Decentralized, Cooperative Atomic Commit Protocol", [Journal of Computer Networks and Communications](#), Volume 2012 (2012), Article ID 782517, 14 pages. doi:10.1155/2012/782517
<http://www.hindawi.com/journals/jcnc/2012/782517/>

· J33 Daniel J. Buehrer and Wang Tzu-Yang, "Authentication and Lookup for Network Services", accepted by [International Journal of Electronic Commerce Studies](#), 2013.

· J34 Daniel J. Buehrer and Wang Tzu-Yang, "Access Control for Shared Ontologies", [International Journal of Electronic Commerce Studies](#), 2013.

Refereed Conferences and Workshops:

· C01 1979 D.J. Buehrer, "Problem-Solving Techniques Applied to Automatic Theorem Proving", [Proceedings of the National Computer Symposium](#), Tamkang University, Taipei.

· C02 1980 D.J. Buehrer, "The Use of Implicit Models in Semantic Resolution", [Proceedings of the International Computer Symposium](#), Chiao-Tung University, Vol. 2, 839-846.

· C03 1981 D.J. Buehrer, "A Pascal LALR(1) Compiler-Compiler", [The Third Conference on Software Techniques](#), Vol. 2, R.O.C. National Science Council, Taipei.

· C04 1981 D.Q. Tsau, D.J. Buehrer, "Extensions and Optimizations of a Pascal

Compiler"

Proceedings of the National Computer Symposium, Cheng Kung University, Tainan, pp.67-79.

· C05 1982 D.J. Buehrer, "Semantic Search and Pruning in Automatic Theorem Proving",

Proceedings of the National Conference on Policy Analysis and Information Systems, Tamkang University, Taipei, pp.705-714.

· C06 1982 D.J. Buehrer, "A Survey of Automatic Theorem Proving", Proceedings of the First Conference on Computer Algorithms, Chiao-Tung University, Hsinchu.

· C07 1982 T.Y. Tang, D.J. Buehrer, R.C.T. Lee, "On the Complexity of Some File Design

Problems", International Computer Symposium, Feng Chia University, Taichung, pp.649-655.

· C08 1982 Pei-Dau Yau and D.J. Buehrer, "EDISON: The Language and Its Implementation", International Computer Symposium, Feng Chia University, Taichung, pp.803-814.

· C09 1982 C.J. Lee, R.C.T. Lee, D.J. Buehrer, "An Approximation Algorithm for the Rural Postman Problem", International Computer Symposium, 1982, Feng Chia University, pp.739-749.

· C10 1982 Shr-Shan Lin and D.J. Buehrer, "PL/M to C Translator", International Computer Symposium, Feng Chia University, pp.815-827.

· C11 1984 D.J. Buehrer, "A Four-Pass Pascal to EM/1 Computer", The Fourth Conference

on Software Techniques, R.O.C. National Science Council, Taipei, pp.69-156.

· C12 1984 Der-Yi Sheu, D.J. Buehrer, Chin-Liang Chang, "A Parallel Unification Algorithm", International Computer Symposium, Tamkang University, pp.916-919.

· C13 1984 D.J. Buehrer, "Logic Programs for Protocol Analysis", International Computer

Symposium, Tamkang University, pp.1221-1228.

· C14 1985 D.J. Buehrer and Hung-Dah Lwo, "A Prolog Expert System Shell", National Computer Symposium, Chung Shan University, Kaohsiung, pp.488-504.

· C15 1985 C.K. Liang, T.T. Wu, W.R. Chang, J.S. Lin, and D.J. Buehrer, "The Design and Implementation of the NTHU Prolog Interpreter", Proceedings of the Fifth

Workshop

on System Software Technology, R.O.C. National Sci. Council, Taipei, pp.93-194.

· C16 1990 D.J. Buehrer, C.C. Chang, "An $O(N*M*T)$ Spatial Match Retrieval Algorithm", Proc. of International Computer Symposium '90, National Tsing Hua University, Hsinchu, Taiwan, pp.152-157.

· C17 1990 D.J. Buehrer, "Capability-Based Search: Finding Appropriate Classes in Object-Oriented Environments", Proc. of the International Conference on Systems Management '90, Hong Kong, Institute of Management Science Consultants, Hong Kong,

June 11-13, pp.153-158.

· C18 1991 C.C. Chang, D.J. Buehrer, "A Cryptographic Mechanism for Sharing Databases", International Conference of Information and Systems (ICIS), AMSE 1991, Oct. 9-11, Zhejiang University, Hangzhou, China, pp.1039-1045.

· C19 1991 C.C. Chang, S.J. Hwang, D.J. Buehrer, "On the Design of Image Databases for

Concurrent Spatial Match Retrieval", International Conference of Information and Systems (ICIS), AMSE 1991, Oct. 9-11, Zhejiang University, Hangzhou, China, pp.1034-1038.

· C20 1991 D.J. Buehrer, "CASE Tool Analysis and Design", "80 Seed Final Report, Institute for Information Industries, pp.7:1-14.

· C21 1991 Yi-Cheng Tu, D.J. Buehrer, "A Query Processing Technique for Distributed Object-Oriented Databases", Workshop on Distributed Database Systems, Hong Kong Computer Society, Dec. 7, 1991, Hotel Victoria, Hong Kong.

· C22 1992 C.C. Chang and D.J. Buehrer "A Database Sharing Scheme Based upon Galois

Field Algebra", Proceedings of SEARCC '92, Aug. 11-14, 1992, Kuala Lumpur, Malaysia, pp.52.01-52.07.

· C23 1992 Yi-Cheng Tu and D.J. Buehrer, "Change Management In Distributed Object Bases", Proceedings of the Third national Conference on Information Management, May

29, Chiao-Tung University, pp. 128-135.

· C24 1992 D.J. Buehrer, "Vague Logic: A First-Order Extension of Interval Probability Theory", IEEE Workshop on Imprecise and Approximate Computation, IEEE

Computer

Society Tech. Committee on Real-Time Systems, Phoenix, Arizona, Dec. 1, 1992, pp.83-

87.

· C25 1992 D.J. Buehrer, "Model Solutions to OODB Problems", 4th International Hong

Kong Computer Society Database Workshop, Hong Kong Computer Society, Dec. 12, 1992.

· C26 1993 Yi-Cheng Tu and D.J. Buehrer, "Clustering Objects for OODBs in a Multiple

Relationship Environment", Pan-Pacific Conference on Information Systems, May 30, 1993, National Sun Yat-Sen University, pp.146-151.

· C27 1993 D.J. Buehrer, "A Truth Maintenance System for Vague Logic", Proc. of the First Asian Fuzzy Systems Symposium, National University of Singapore, Nov. 23-26, 1993.

· C28 1993 D.J. Buehrer and C.C. Chang, "Application of a Reciprocal Confluence Tree Unit to Similar-Picture Retrieval", The Third International Symposium on Large Spatial Databases, National University of Singapore, pp.23-26.

· C29 1993 C.C. Chang, Ren-Junn Hwang, D.J. Buehrer, "Using Smart Cards to Authenticate Passwords", Proceedings 27th Annual 1993 IEEE International Carnahan Conference on Security Technology, Ottawa/Hull, Canada, pp.154-156.

· C30 1993 C.C. Chang and D.J. Buehrer, "Transmitting Multiple Secrets Securely in Broadcasting Networks, Proceedings 27th Annual 1993 IEEE International Carnahan Conference on Security Technology, Ottawa/Hull, Canada, 1993, pp.19-21.

· C31 1994 C.C. Chang, F.Y. Liou, and D.J. Buehrer, "A Practical Database Encryption System", Proceedings of IFIP Technical Committee 11, Elsevier North Holland, May 23-27, 1994.

· C32 1994 D.J. Buehrer, "From Interval Probability Theory to Computable Fuzzy First-Order Logic and Beyond," Proceedings of IEEE World Congress on Computational Intelligence, June 26-July 2, Orlando, Florida, pp.1428-1433.

· C33 1994 Yu-Chi Liu and D.J. Buehrer, "An Algorithm for Text/Image Segmentation",

Proceedings of 1994 Conf. on Computer Vision, Graphics, and Image Processing (CVGIP'94), Aug.29-31, Shan-Lin Sea, Taiwan, pp.63-68.

· C34 1995 D.J. Buehrer, "[An Object-Oriented Class Algebra](#)", in [Proceedings of ICCI '95](#):

[7th International Conference on Computing and Information](#), Peterborough, Ontario, Canada, July 5-8, 1995, pp.669-685.

· C35 1995 C.C. Chang, D.J. Buehrer, and S.J. Hwang, "A Simple Secret Key Distribution

System", Proceedings of the 5th Conference on Information Security, Inst. of Technology, Taipei, May, 1995, pp.125-128.

· C36 1996 D.J. Buehrer, Y.H. Liu, T.Y. Hong, J.J. Jou, "[Class Algebra as a Description Logic](#)", [AAAI Lecture Notes, Proceedings of the 1996 Description Logic Workshop](#), Nov. 2-4, Boston, pp.92-96, 1996.

· C37 1996 D.J. Buehrer, L.Y. Huang, T.Y. Hong, K.L. Hou, "A User Interface for an ODMG-93 Compliant Database", International Conf. on Distributed Systems, Software Engineering, and Database Systems, ICS'96 , Dec. 19-21, Kaohsiung, Taiwan, pp.68-75.

· C38 1997 D.J. Buehrer, "Using Fuzzy Logic for Off-Line Recognition of Chinese Handwritten Characters", National Science Council 1996 Project Reports Meeting, April

24-25, Chiao-Tung University, Hsinchu, pp.C3-9 - C3-18.

· C39 1998 Jr-Ren Tsai, Gwo-Cheng Chao, and D.J. Buehrer, "Using RMI to Implement Remote Controller/Viewer Applets for Java Applications", ICS'98 Workshop on Computer Networks, Internet, and Multimedia 1998 ICS Proceedings, National Chung Kung University, Dec. 17-19, pp.1-8.

· C40 1999 D. Buehrer and Chee-Hwa Lee, "[Class Algebra for Ontology Reasoning](#)", [Proc. of TOOLS Asia 99 \(Technology of Object-Oriented Languages and Systems, 31st International Conference\)](#), [IEEE Press](#), Nanjing, China, Sept. 22-25, pp.2-13.

· C41 Shyu Cheng-Hsin, D. Buehrer, Chao Gwo-Cheng, Tsai Ji-Ren, "Making Java Applications Run Remotely", Proc. of 2000 Workshop on Internet and Distributed Systems, May 12, 2000, National Chung Kung University, pp. 319-331.

· C42 C.C. Chang, D.J. Buehrer, W.B. Lee, "A Method for Constructing a Generalized Group-Oriented Cryptosystem", WISA 2000: The First Workshop on Information Security Applications, Seoul, Korea, Nov. 23-24, 2000, pp.119-124.

- C43 Chen Chun-Ting, Lo Tse-Win, Hsieh Chih-Ming, Hou Kai-Liang, Daniel J. Buehrer,
"The Implementation of a Server for a Distributed Class Algebra Database System",
International Computer Symposium 2000, National Chung Cheng University, Dec. 6-8,
2000, pp.201-208.
- C44 D. Buehrer and Tzu-Yang Wang, ["The Cadabia Database Project"](#), The 14th
Workshop on Object-Oriented Technology and Applications, Ywan Jr University, Jung
Li, Sept. 12, 2003, pp.385-92.
- C45 D. Buehrer and Li-Ren Chien, ["Knowledge Creation Using Class Algebra"](#), IEEE
NLP-KE 2003, Beijing, China, Oct. 26-29, 2003, pp.108-113.
- C46 D. Buehrer and Chun-Yao Wang, ["Intelligent Sharing of Classes"](#), International
Conference on Informatics, Cybernetics, and Systems (ICICS) I Shou Univeristy,
Kaohsiung, Dec. 14-16, 2003.
- C47 D. Buehrer and Li-Ren Chien, [Reasoning with Class Algebra](#), Proceedings of
IASTED International Conference on Neural Networks and Computational Intelligence,
Grindewald, Switzerland, Feb. 23-25, 2004.
- C48 D. Buehrer and Chun-Yao Wang, [Using a Class Algebra Ontology To Define
Conversions between OWL/SQL/Java Beans](#), , Proceedings of the 2004
IEEE/WIC/ACM
International Conference on Web Intelligence (WI'04), IEEE Computer Society Press,
September 20-24, 2004, Beijing, China, pp.752-4.
- C49 Tse-Yang Wang and D. Buehrer, [Triples vs. Class Algebra Path Expressions](#),
Proceedings of Knowledge Engineering meets Science and Technology (KEST 2004),
Sept. 17-19, 2004, Beijing, pp.52-57.
- C50 Li-Ren Chien, D. J. Buehrer, Chin-Yi Yang, "Using Test-Driven Development in
a
Parse-Tree Based On-Line Assessment System", IADIS E-Learning 2007 Conference,
Lisbon, Portugal, July 6-8, 2007.
- C51 Li-Ren Chien, D. J. Buehrer, Chin-Yi Yang, "An Adaptive Learning Environment
in
the DICE System with a TDD Model", ICL 2007, Villach, Austria, September 26-28,
2007.
- C52 Li-Ren Chien, D. J. Buehrer and Chin Yi Yang, 2007, "Dice: A Parse-Tree Based

On-Line Assessment System for a Programming Language Course”, *E-Learn 2007*, Association for the Advancement of Computing in Education, Quebec City, Canada, October 15-17, 2007.

· C53 Li-Ren Chien, D. J. Buehrer, “Using a Typed Mind Map as a Data Model in a TDD

DICE System”, Proceedings of the ITI 2008 30th Intl. Conf. on Information Technology, Cavtat, Croatia, June 23-26, 2008.

· C54 Chun-Yao Wang, D. J. Buehrer, “A Ring-Based Architecture for a Multi-Tier Transactional System”, Proceedings of the International Symposium on Information Technology 2008.

· C55 Li-Ren Chien, D. Buehrer, “A Visual Lambda Calculator Using Typed Mind Maps”, The 2008 International Conference on Computers and Electrical Engineering, December, 2008.

· C56 Chun-Yao Wang, D. J. Buehrer, “A Ring-Based Decentralized Collaborative non-Blocking Atomic Commit Protocol”, 2008 IEEE/WIC/ACM International Conference on

Web intelligence and Intelligent Agents”, Beijing, December, 2008.

· C57 D. J. Buehrer, “Class Algebra”, IASTED International Conference on Advances in

Computer Science and Engineering, Phuket, Thailand, March, 2009. [2009 ACSE Paper](#)

· C58 **Daniel J. Buehrer**, Wang Tzu-Yang, The Cadabia Persistent Storage Service, International Conference on New Trends in Information and Service Science - NISS , 2009.

· C59 Chin-Yi Yang, Li-Ren Chien, **Daniel J. Buehrer**, Chyong-Mei Chen, An Evaluation on Interaction between APAS, TDD and Learning Style, International Conference on New Trends in Information and Service Science - NISS , 2009.

· C60 Daniel J. Buehrer and Chun-Yao Wang, “Distributed Transactions for Semantic Web Workflows; Overcoming the CAP Limitations on Virtual Organizations”, Proceedings of the 2010 IEEE International Symposium on Parallel and Distributed Processing with Applications (ISPA10), Taipei, Taiwan, September 6-9, 2010.

<http://ispa10.csie.ntust.edu.tw/>

· C61 Daniel J. Buehrer, Wang Chun-Yao, and Chien Li-Ren, “The Cadabia Cloud”, Cloud Computing, Applications and Technology (CloudCAT 2010) Workshop of the

2010 IEEE International Symposium on Parallel and Distributed Processing with Applications (ISPA10), Taipei, Taiwan, September 6-9, 2010.

<http://www.cs.thu.edu.tw/cloudcat2010>

· C62 **Daniel J. Buehrer**, Wang Chun-Yao, Chien Li-Ren The Cadabia Cloud, IEEE International Symposium on Intelligent Signal Processing - WISP, 2010.