

Eric A. Wernert
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Professional Preparation

Bellarmino College	Mathematics, Computer Science, & Secondary Education	B.A. (<i>summa cum laude</i>), 1985
Indiana University	Computer Science	M.S., 1991
Indiana University	Computer Science	Ph.D., 2000

Appointments

2006-	Senior Manager and Scientist, Visualization Technologies and Futures, UITS, Indiana University
2005-06	Associate Director (Acting), UITS Research & Academic Computing Division, Indiana University
2001-05	Senior Scientist & Manager, UITS Advanced Visualization Laboratory, Indiana University
2002	Visiting Assistant Professor, Computer Science Department, Indiana University
2002-	Affiliated Faculty, School of Informatics, Indiana University
1994-00	Computer Graphics & Virtual Reality Lecturer, Computer Science Department, Indiana University
1999-00	Acting Manager & Senior Research Programmer, UITS Advanced Visualization Lab, Indiana University
1997-99	Senior Research Programmer & Team Leader, UITS Virtual Reality / Virtual Environments Lab, Indiana University
1996-97	Graphics Software Specialist, Center for Innovative Computer Applications, Indiana University
1992-96	Undergraduate Course Coordinator, Computer Science Department, Indiana University
1989-92	Associate Instructor, Computer Science Department, Indiana University
1985-89	Mathematics and Computer Science Teacher, Mathematics Department, St. Xavier High School, Louisville, Kentucky

Publications

Related publications from the past five years:

1. Wernert, E. A., M. J. Boyles, J.N. Huffman, J.L. Rogers, J. C. Huffman, C. A. Stewart, "The John-e-Box: Fostering Innovation, Inclusion, and Collaboration through Accessible Advanced Visualization", *Tapia 2005*, Albuquerque, NM, October 2005.
2. Wernert, E. A., and Lakshminpathy, J., "PViN – A Scalable and Flexible System for Visualizing Pedigree Databases", *Proceedings of SAC 2005 – ACM Symposium on Applied Computing*, Santa Fe, NM, March 2005.
3. Lakshminpathy, J., W. L. Nowinsky, E. A. Wernert, "A Novel Approach to Extract Triangle Strips for Iso-surfaces in Volumes", *VRCAI 2004, ACM SIGGRAPH International Conference on Virtual Reality Continuum and its Application in Industry*, Singapore, June 2004.
4. Stewart, C.A., D. Hart, D. K. Berry, G. J. Olsen, E. A. Wernert, W. Fischer, "Parallel Implementation and Performance of fastDNAmI – A Program for Maximum Likelihood Phylogenetic Inference", *Proceedings of Supercomputing 2001*, Denver, CO, November 2001.
5. Hanson, A. J., Chi-Wing Fu, and E. A. Wernert, "Very Large Scale Visualization Methods for Astrophysical Data", *Data Visualization 2000*, pages 115-124, 2000. Proceedings of the Joint Eurographics and IEEE TVCG Symposium on Visualization, May 29-31, 2000, Amsterdam, the Netherlands; Springer-Verlag.

Other Selected Publications:

1. Wernert, E. A., D. K. Berry, J. N. Huffman, C. A. Stewart, “Tree3D - A System for Temporal and Comparative Analysis of Phylogenetic Trees”, *Proceedings of IEEE Information Visualization 2003 – Interactive Poster*, Seattle, WA, October 2003.
2. Hanson A. J., Chi-Wing Fu, and E. A. Wernert, “Visualizing Cosmological Time”, *Proceedings of Dagstuhl 2000*, 21-26 May 2000, Dagstuhl, DE, 2002.
3. Wernert, E. A. and A. J. Hanson, “A Framework for Assisted Exploration with Collaboration”, *Proceedings of IEEE Visualization '99*, pages 241-248. IEEE Computer Society Press, 1999.
4. Hanson, A. J., E. A. Wernert, and S. B. Hughes, “Constrained Navigation Environments”, *Scientific Visualization: Dagstuhl '97 Proceedings*, pages 95-104. IEEE Computer Society Press, 1999.
5. Wernert, E. A.. “A Unified Environment for Presenting, Developing, and Analyzing Graphics Algorithms”, *Computer Graphics (ACM SIGGRAPH)* 31(3), pp. 26-28, August 1997.

Synergistic Activities

1. Served as organizer and co-chair of I-Light Symposium 2005, along with Dr. Gary Bertoline of Purdue University. The I-Light Symposium is Indiana’s premier forum for high performance networking, computing, and advanced visualization. The 2005 event featured over 50 presentations and 4 nationally-known, featured speakers over a two day event. (www.i-light.org/symposium05/). March-Sept. 2005
2. Developed curriculum and methodology for an inter-institutional, tele-collaborative class, “Introduction to Virtual Environments” in conjunction with Dr. Laura Arns from Purdue University. The course is delivered using Access Grid technology across Indiana’s optical fiber backbone, iLight. Jan.-May 2004
3. Co-Investigator for 3D facial imaging core of NIH/NIAAA grant “A Cross-Cultural Longitudinal Assessment of FASD” (U01-AA014809-01) with investigators from four IU departments and five external institutions. Directed investigation and analysis of 3D scanning technologies, and the development of methodology and analysis software for deployment at multiple international sites. 2003-ongoing
4. Served as TeraGrid visualization lead for Indiana University. Responsible for planning IU’s visualization strategy and policies; coordinating efforts of visualization-related labs at IU; testing TeraGrid visualization configurations; and helping apply TeraGrid infrastructure to appropriate IU projects. 2003-2005
5. Co-inventor of the “John-e-Box” portable passive stereo display system with John N. Huffman of UITS/AVL and John C. Huffman of IUB Chemistry. The John-e-Box has been licensed to and produced by Indianapolis-based CAE-net, Inc., with 12 units deployed to date. The John-e-Box has served as the core of the UITS scientific and artistic outreach efforts to the broader Indiana community, including partnerships with the Indianapolis-Marion County Libraries, the Brownsburg Challenger Center, and the Indianapolis Museum of Art. 2001-ongoing

Collaborators and Other Affiliations

Collaborators during the last 48 months:

Tatiana Foroud, T.K.Li, (Indiana University School of Medicine), Andrew Hanson, Chi-Wing Fu (Indiana University Bloomington (IUB), Computer Science), Laura Arns, Gary Bertoline (Purdue University), Raymond Burke (IUB, Kelley School of Business), Nema Nematollahi (CAE-net, Inc.), Katy Borner (IUB, School of Library and Information Science), Shiaofen Fang, Jeffrey Huang (IUPUI – Computer Science), Rhonda Winters (Indianapolis Museum of Art), John C. Huffman (IUB, School of Informatics)

Graduate Advisor:

Andrew J. Hanson (Indiana University, Bloomington, IN).