

Christopher R. Johnson

CONTACT INFORMATION 1110 Roosevelt Ave.
Ames, IA 50010

Email: cjohnson@cs.iastate.edu
Phone: (515) 233-4249
Web: <http://www.cs.iastate.edu/~cjohnson>

EDUCATION **The University of Tennessee**, Knoxville, TN, USA

Ph.D. Computer Science, 2009

- ▶ Dissertation Topic: Enhancing User Queries in Scientific Visualization with Distribution Information
- ▶ Advisor: Professor Jian Huang
- ▶ GPA: 3.97/4.0

M.S. Computer Science, 2005

- ▶ GPA: 3.95/4.0
- ▶ Member of ACM student chapter

University of Northern Iowa, Cedar Falls, IA, USA

B.S. Computer Science, 2003, *summa cum laude*

- ▶ Completed two years as English double major
- ▶ Recipient of Science, Math, and Technology Symposium scholarship
- ▶ Member of computer science honor society Upsilon Pi Epsilon

TEACHING EXPERIENCE

Lecturer

Iowa State University

Fall 2008–present

Ames, IA

- ▶ Coordinate departmental freshman learning community
- ▶ Meet prospective students
- ▶ Teach large (60+ students) object-oriented programming classes

Adjunct Faculty

William Penn University

Summer–Fall 2006

Ames, Des Moines, IA

- ▶ Instructed students in College for Working Adults program in course on Microsoft software.

Teaching Assistant

University of Tennessee

Fall 2003–Fall 2004

Knoxville, TN

- ▶ Directed recitation and lab sessions for courses on introductory C programming, graduate/undergraduate computational theory, and MATLAB

RESEARCH EXPERIENCE

Visualization Researcher

University of Tennessee

Spring 2005–Summer 2009

Knoxville, TN

- ▶ Developed software for interactive exploration of scientific data
- ▶ Explored novel techniques for displaying time-variant data as static image
- ▶ Constructed scripting language for custom frequency-based feature queries

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Predocctoral Associate

February 2007–Summer 2008

Ames Laboratory

Ames, IA

- ▶ Maintained established interactive chemistry graphics software
- ▶ Incorporated stereo support and molecular construction tools

Visualization Intern

Summer 2004

Oak Ridge National Laboratory

Oak Ridge, TN

- ▶ Built tools for visualization of large-scale supernova simulation
- ▶ Scripted suite of tools for management of large display walls

OTHER WORK EXPERIENCE

Peer Minister

Summer 2001–Summer 2003

Lutheran Student Center

Cedar Falls, IA

- ▶ Served student population in outreach, church services, and mission trips
- ▶ Counseled and supported students through trials and joys of life

Computer Programmer

Fall 2002–Summer 2003

Dyton Media, Inc.

Cedar Falls, IA

- ▶ Automated processing of textbook publishers' content into web-ready format

Resident Assistant

Fall 2000–Spring 2001

University of Northern Iowa

Cedar Falls, IA

- ▶ Mentored, doctored, and sometimes parented floor of 50 gentleman
- ▶ Devised programming and assisted in smooth operation of hall affairs

Camp Counselor

Summer 2000–Summer 2002

Ingham Lake Bible Camp

Wallingford, IA

- ▶ Served as storyteller, playmate, milk-pourer, and spiritual guide for youths in grades 1–8

SUBMITTED PUBLICATIONS

- ▶ Robert Sisneros, C. Ryan Johnson, and Jian Huang. Concurrent visualization of unconstrained multivariate relationships.
- ▶ C. Ryan Johnson and Jian Huang. Periographs: An interactive framework for querying large-scale multivariate data.

PUBLICATIONS

- ▶ C. Ryan Johnson, Markus Glatter, Wesley Kendall, Jian Huang, and Forrest Hoffman. Querying for feature extraction and visualization in climate modeling. In *ICCS 2009: Geo Computation*, volume 5545 of *Lecture Notes in Computer Science*, pages 416–425. Springer, 2009.
- ▶ C. Ryan Johnson and Jian Huang. Distribution driven visualization of volume data. *IEEE Transactions on Visualization and Computer Graphics*, 15(5):734–746, 2009.
- ▶ Robert Sisneros, C. Ryan Johnson, and Jian Huang. Concurrent viewing of multiple attribute-specific subspaces. In *Proceedings of EuroVis Conference*. Eurographics Association, 2008.
- ▶ Jinzhu Gao, Jian Huang, C. Ryan Johnson, Scott Atchley, and James Arthur Kohl. Distributed data management for large volume visualization. In *Proceedings of IEEE Visualization*, pages 183–189, Minneapolis, MN, October 2005. IEEE Computer Society.

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SERVICE

- ▶ Reviewer, IEEE Visualization
- ▶ Vice President Public Relations, Town and College Toastmasters Club
- ▶ Student volunteer, IEEE Visualization Conference, 2006–2007
- ▶ Conversation Partner with Japanese student, UNI
- ▶ Contributor to wxWidgets open source project
- ▶ IEEE student member

HOBBIES

- ▶ Biking
- ▶ Gardening
- ▶ Living light on the earth