

Candidate for Chair

Jeremy Russell Johnson
Drexel University, Philadelphia, PA USA

BIOGRAPHY

Academic Background:

Ph.D., The Ohio State University, 1991, Computer Science.

Professional Experience:

Professor and Dept. Head, Drexel University, Philadelphia, PA USA, 2002 – 2009;

Visiting Associate Professor, Carnegie Mellon University, Pittsburgh, PA USA,
1998 – 1999;

Associate Professor with tenure, Drexel University, Philadelphia, PA USA, 1997 – 2002.

Professional Interest:

Computer Algebra Algorithms and Systems; High Performance Computing; Problem Solving Environments; Automated Performance Tuning; Hardware Generation.

ACM Activities:

General Conference Co-Chair, International Symposium on Symbolic and Algebraic Computation (ISSAC), 2009;

Program Committee Member (multiple times - last indicated), International Symposium on Symbolic and Algebraic Computation (ISSAC), 2006.

Membership and Offices in Related Organizations:

Member (currently chair) Cognitive and Computer Science Cluster, Franklin Institute - Committee on the Arts and Sciences, 2006 – 2009;

Member Steering Committee (chair 2008), International Symposium on Symbolic and Algebraic Computation (ISSAC), 2005 – 2008;

Co-founder (1994) and co-organizer, East Coast Computer Algebra Day, 2006.

Awards Received:

Drexel University Outstanding Online Instructor, 2008; Project SPIRAL (used by Intel MKL and IPP libraries), 2008; SPIRAL project (www.spiral.net) funded by DARPA, NSF, Intel.

STATEMENT

The computer algebra (CA) and symbolic computing community has a long history of significant contributions to Computer Science, Education, Mathematics, and a wide variety of application domains. Fundamental algorithmic problems have been solved, and we now take for granted the availability of powerful general purpose CA systems. These systems

are commonly used when teaching mathematics and related topics and many symbolic mathematical computations are performed routinely. Despite the many successes CA remains a niche field in many universities and the SIGSAM community has shown little growth.

If elected, my primary objective would be to promote the field and to broaden and increase the SIGSAM community. I would work on strengthening the interaction between SIGSAM and other computer algebra related organizations and conferences and would reach out to other communities that use computer algebra systems. Specifically:

- Sponsor and affiliate with conferences worldwide to promote CA and reach out to students and users in addition to researchers;
- Provide a forum for sharing CA resources and expertise for applications and education;
- Extend the type of material included in the CCA to benefit a wider audience and promote cross-collaboration;
- Provide a venue for CA developers to promote and obtain recognition for their software.