Biographical Sketch

Robert A. Beezer

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Professional Preparation

University of Santa Clara	Mathematics, Computer Science, B.S. 1978
University of Illinois at Urbana-Champaign	Statistics, M.S. 1982
University of Illinois at Urbana-Champaign	Mathematics, Ph.D. 1984

Appointments

- Distinguished Professor, University of Puget Sound, 2011–present.
- Lecturer, African Institute for Mathematical Sciences, 2010–present.
- Professor of Mathematics, University of Puget Sound, 1996–present.
- University Professor, University of Puget Sound, Fall 2001–Spring 2006.
- Chair, Mathematics and Computer Science Department, Univ. of Puget Sound, 1999–2002.
- Research Visitor, University of Western Australia, Fall 1997.
- Associate Professor of Mathematics, University of Puget Sound, 1990–1996.
- Visiting Lecturer, University of the West Indies, Trinidad, Spring 1991.
- Assistant Professor of Mathematics, University of Puget Sound, 1984–1990.

Closely Related Products

- *A First Course in Linear Algebra*, Congruent Press, 540 pp., GFDL licensed online open textbook, http://linear.ups.edu.
- MathBook XML: textbook authoring and publishing system, under active and continuous development. Website: http://mathbook.pugetsound.edu. Source Code (GPL license): https://github.com/rbeezer/mathbook.
- Extensive development work on the Sage computer algebra system, particularly in linear algebra, graph theory and group theory. Peer-reviewed contributions at sagemath.org.
- *Sage* (Chapter 91), with R. Bradshaw, J. Grout, W. Stein, Handbook of Linear Algebra, Second Edition, CRC Press, (2014), p. 91-1–91-25.
- *The Truly Free Textbook*, EDUCAUSE Review Magazine, **44**, no. 1 (2009) 22–24.

Other Significant Products

- *Extended echelon form and four subspaces*, American Mathematical Monthly, August-September 2014, no. 4, 644–647.
- *Sylow subgraphs of self-complementary vertex transitive graphs*, Expositiones Mathematicae, **24**, no. 2 (2006) 185–194.
- *Counting configurations in designs*, Journal of Combinatorial Theory, Series A **96** (2001), no. 2, 341–357.
- *Using minimum degree to bound average distance*, with B. Smith and J. Riegsecker, Discrete Mathematics, **226** (2001) 365–371.
- *Trees with very few eigenvalues*, Journal of Graph Theory, **14**, no. 4 (1990) 509–517.

Synergistic Activities

- **Sage Educational Days Workshops** Organizer of annual faculty development workshops on the effective use of Sage software in educational settings. 2011, 2012, 2013, 2014.
- **Sage** Contribute and review code for Sage in the areas of linear algebra, group theory, graph theory, combinatorial designs and LaTeX integration.
- **Open Textbooks** Author of two open textbooks for linear algebra. Co-author (with Chris Godsil) of the online textbook *Explorations in Algebraic Graph Theory with Sage*. Production Editor for Judson's open source abstract algeba book and contributor of Sage material and exercises. Advocate for wider acceptance of open educational resources, through writings and presentations, both in mathematics and more widely.
- **African Institute for Mathematical Sciences** Annually (since 2010) give an intensive three-week course featuring extensive use of Sage and open textbooks to approximately fifty masters students from the entire continent. AIMS is a pan-African initiative in Cape Town, South Africa dedicated to building scientific capacity across Africa. Recent visits have been supported by Fulbright Specialist grants.
- **Collaborative Authoring Tool** Designing a web application to allow for collaborative creation, editing and maintenance of structured scholarly documents (with David Farmer, Steve Blood).

Collaborators and Other Affiliations

- **Collaborators and Co-Editors** (8 collaborators, plus many of the roughly 500 Sage developers) Robert Bradshaw (Google), David Farmer (American Institute of Mathematics), Chris Godsil (U. of Waterloo), Jason Grout (Drake U.), Tom Judson (Stephen F. Austin State U.), Sang-Gu Lee (Sungkyunkwan University, Korea), Kent Morrison (American Institute of Mathematics), William Stein (U. of Washington), Sage Developers (various).
- **Graduate Advisors and Postdoctoral Sponsors** (1 graduate advisor) Paul Weichsel, University of Illinois at Urbana-Champaign.
- **Thesis Advisor and Postgraduate-Scholar Sponsor** (0 individuals advised) None.