

# Daryl H. Hepting

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## Education

- 1992-99 Simon Fraser University, Burnaby, British Columbia, Canada. Ph.D.  
Thesis: A New Paradigm for Exploration in Computer-aided Visualization.  
Supervisory committee: Drs. R. D. Russell (Mathematics and Statistics), J. C. Dill (Engineering Science), and F. D. Fracchia (Computing Science). External examiner: Dr. J. Marks, MERL.
- 1988-91 University of Regina, Regina, Saskatchewan, Canada. Master of Science.  
Thesis: Approximation and Visualization of Sets Defined by Iterated Function Systems.  
Supervisory committee: Drs. P. W. Prusinkiewicz (Computer Science), A. G. Law (Computer Science), and J. C. Fisher (Mathematics and Statistics).
- 1983-88 University of Regina, Regina, Saskatchewan, Canada. Bachelor of Science.  
Major: Computer Science and Mathematics, with honours in Computer Science.

## Teaching

- 2006- Associate Professor, University of Regina.
- CS890DK: Advanced Topics in Personalization (Spring/Summer, 2006).
  - CS890CF: Human Computer Communication (Fall, 2006).
  - CS325/FILM385AB: Introduction to Multimedia Systems (Fall 2006).
  - CS305: Human Computer Communications (Fall 2006).
  - CS215: Introduction to Web Programming (Winter 2007).
- 2004 Participant. 7th Annual Teaching Institute, Teaching Development Centre, University of Regina.
- 2001-06 Assistant Professor, University of Regina.
- CS890CF: Human Computer Communication (Winter, 2004, 2006).
  - CS890BX: Digital Asset Management (Winter, 2003).
  - CS890BO: Visual Software Modelling (Spring/Summer, 2002).
  - CS490BM: Introduction to Multimedia Systems (Fall, 2002).
  - CS490BL: Server-side Web Application Development (Winter, 2002).
  - CS490BK: Multimedia Programming with DirectX (Winter, 2002).
  - CS490AP: Emerging User Interface Design (Winter, 2005).
  - CS490AL: Special Topics - Computer Graphics (Winter, 2005).
  - CS390AK: Web Development and Production (Fall, 2005).
  - CS330: Introduction to Operating Systems (Fall, 2003, 2004, Winter 2006).
  - CS325 (formerly CS390AI)/FILM385AB: Introduction to Multimedia Systems (Fall 2002, 2003, 2004, 2005).
  - CS305: Human-Computer Communications (2001 Fall, 2002 Fall).
  - CS230: Computer Science III (2005 Winter).
- 1997-99 Lecturer, Simon Fraser University.
- CMPT361: Introduction to Computer Graphics (1999 Fall, 1999 Summer, 1997 Fall).
- 1995 Participant. Instructional Skills Workshop, Simon Fraser University.
- 1988-91 Lecturer, University of Regina.
- CS271: Business Application Development (1991 Winter, 1988 Summer).
  - CS230: Software Productivity Tools (1991 Winter, 1990 Fall).

## Experience

- 2006 Organized and promoted a new course offering called *CS490CN: Open Source Software Development* to be offered through the Weekend University of the Credit Studies Division of the Centre for Continuing Education.
- 2006 Organized, promoted, and hosted a visit to Regina by Gerhard Fischer, Director of the Centre for Lifelong Learning and Design and a Fellow of the Institute of Cognitive Science at the University of Colorado at Boulder.
- 2006 Established, promoted, and led a transdisciplinary research project team (including M. Jones from Economics, J. Jaffe from Sociology, and J. Piwowar from Geography) around issues of information pertaining to local food. Also established and promoted virtual community website at <http://lofo.uregina.ca>.
- 2005 Organized (with D. Gerhard, P. Elliott, R. Petry, and C. Polster) conference "Free Knowledge: Creating a Knowledge Commons in Saskatchewan", November 17 and 18, 2005, Riddell Centre Multipurpose Room.
- 2002-03 Prepared proposal for a new Computer Science B.Sc. degree option entitled "Interactive Media Development", approved by Faculty of Science in 2003.
- 2002 Established SENILE (Software Engineering Network Isolated Learning Environment) Lab for undergraduate education. Coordinated equipment donations within the university from CATAL (Community Access to Technology Assisted Learning) and Computing Services.
- 2002 Established (with S. Petty and B. Maguire) UDML (Undergraduate Digital Media Lab) to provide new media education options to undergraduates in Computer Science and Media Production and Studies. Funded through Western Economic Diversification, and provincial government directed base-budget money.
- 2002 Established participant pool in Computer Science Department as a means to encourage interest in research and availability of participants for research studies.
- 2000-01 Chief Technology Officer, Eye2Buy Technology Company, Vancouver, British Columbia. Responsible for architecture of systems for interactive television services, obtaining external funding (IRAP) for research and development activities, project management for market assessment studies, contributing to business development activities, and management of technical staff.
- 1996-99 Designed, implemented, and studied the *cogito* software system for exploratory visualization.
- 1995 Co-curated (with E. Gibson, M. Dubiel, and K. Heinrich), MATH-ART exhibit, Teck Gallery at SFU Harbour Centre, 9 December 1995 – 24 January 1996.
- 1994-95 Editor and chief contributor, *Fractals* calendar, years 1995 and 1996. Universe Publishing, New York.
- 1994 Member of *Fractals Project* at Yale University and IBM T. J. Watson Research Center, supervised by B. B. Mandelbrot.
- 1991-92 Research Assistant to B. B. Mandelbrot, IBM T. J. Watson Research Center.
- 1989-91 Designed and implemented *gti* software for approximation and visualization of linear fractals.

## Funding

- 2006 *Regina Integrative Cognitive Experimentation (RICE) Lab*, Canada Foundation for Innovation Leaders Opportunity Fund. Total project budget: \$314,000.
- 2005 *CS325/FILM385AB: Introduction to Multimedia Systems*. Campus Saskatchewan Technology Enhanced Learning Project Fund. Awarded \$30,000.
- 2005 *Challenging Bodies*, with K. Irwin, Saskatchewan Arts Board Project Grant. Awarded \$5,000.
- 2004 *Challenging Bodies: A Multimedia Environment for Physically-Challenged Expression*, with J. Barden, D. Gerhard, K. Irwin, R. Viader Knowles, and A. Kipling-Brown, University of Regina Transdisciplinary Project Fund. Awarded \$2,500.

- 2004 *Creating an Information Commons: Responses to Commercialization and Globalization*, with P. Elliott, P. Fong, D. Gerhard, R. Petry, and C. Polster, University of Regina Transdisciplinary Project Fund. Awarded \$2,000.
- 2004 *CS305: Human Computer Communications*, with D. Gerhard. Campus Saskatchewan Technology Enhanced Learning Project Fund. Awarded \$32,000.
- 2004 *Open Systems Lab*, with P. Fong, Western Economic Diversification Canada. Awarded \$60,000 (total project budget of \$66,000 with contribution from University of Regina Faculty of Science).
- 2004 *Interactive Media Lab*, with H. Hamilton, X.-D. Yang, and D. Gerhard, Western Economic Diversification Canada. Awarded \$97,000 (total project budget of \$107,000 with contribution from University of Regina Faculty of Science).
- 2004 *Speaking my future: Storytelling with technology*, with L. Carlson Berg, E. Doolittle, N. Fuller, and C. Willett, University of Regina Indigenous Peoples Educational Project Fund. Awarded \$2,500.
- 2004 *IMAGINE Laboratory for Animation, Graphics, Interactivity and Music*, with X.-D. Yang, D. Gerhard, H. Hamilton, and B. Yang, NSERC Research Tools and Instruments, Category 1. Awarded \$44,594.
- 2003 *Open Source Seminar Series: Ideals, Politics, Business Models, and Technical Challenges*, with P. Fong, D. Elliott, R. Petry, and R. Anderson, University of Regina Transdisciplinary Project Fund. Awarded \$2,500.
- 2003 *The Bus Project*, with K. Irwin and R. Viader Knowles, University of Regina Transdisciplinary Project Fund. Awarded \$2,500.
- 2003 *Total Product Assessment for Sustainable Consumption*, with C. Butz and R. Hilderman, University of Regina Sustainable Communities Initiative. Awarded \$10,000.
- 2003 *Non-verbal interface technologies*, with K. D. Arbuthnott, NSERC Research Tools and Instruments, Category 1. Awarded \$46,681.
- 2002 *Computer-aided facial composite construction and analysis*, President's Fund/SSHRC General Research Grant. Awarded \$2,500.
- 2002 *A Study of Open Source Software and Factors Affecting its Adoption in Academic Settings*, with L. Benedicenti, T. Chase, and R. Petry, University of Regina Transdisciplinary Project Fund. Awarded \$2,500.
- 2002 *Proposal for an Undergraduate New Media Facility at the University of Regina*, with S. Petty and R. B. Maguire, Western Economic Diversification. Awarded \$198,000.
- 2002 *Computer Animation Software: Design Principles*, with H. Hamilton and C. Fox, Technology Enhanced Learning Project Fund. Awarded \$30,000.
- 2002 *Conceptual spaces: theory and tools*, NSERC Discovery Grant, Awarded \$15,000 per year for 4 years.
- 2001 *Technological interfaces and pedagogical practice: strategies for avoiding learning errors*, with K. D. Arbuthnott and M. Bradley. University of Regina Transdisciplinary Project Fund, Awarded \$2,500.
- 2001 *Electronic Media Interaction*, with M. Bradley and J. Bristol, University of Regina Transdisciplinary Project Fund. Awarded \$2,500.

## Scholarly Publications

- S43 D. H. Hepting, *Software for Systematic and Imaginative Exploration*, Proceedings of Creativity and Cognition 2007. To appear.
- S42 D. H. Hepting, T. J. Maciag, and S. A. A. Rizvi, *Information Technology in Support of Sustainable Food Choices*, Proceedings of the International Symposium on Environmental Software Systems (ISESS) 2007. To appear.
- S41 T. J. Maciag and D. H. Hepting, *Interface Design for Diverse Decision Strategies*, Proceedings of the International Symposium on Environmental Software Systems (ISESS) 2007. To appear.

- S340 T. J. Maciag, D. H. Hepting, D. Slezak, R. J. Hilderman, *Mining Associations for Interface Design*, Proceedings of the Joint Rough Set Symposium 2007 (JRS07). To appear.
- S339 D. H. Hepting and P. Schmiedge, *A User-Driven Interface for Exploring Visualizations*, Proceedings of Visualization and Data Analysis (VDA) 2007. To appear.
- S338 B. S. McIntosh et al., *Bridging the gaps between design and use: developing tools to support environmental management and policy* [Hepting is 19<sup>th</sup> of 24 authors], to appear as a book chapter within Elsevier's IDEA book series entitled *Developments in Integrated Environmental Assessment*.
- S337 T. J. Maciag, D. Slezak, and D. H. Hepting, *Consumer Modelling in Support of Interface Design*, Proceedings of 2006 International Conference on Hybrid Information Technology (ICHIT), Volume 2, pages 153–160, 2006.
- S336 D. H. Hepting and T. J. Maciag, *Opening Access to Environmental Software Systems*, Proceedings, 3rd Biennial Meeting of the International Environmental Modelling and Software Society, 2006.
- S335 D. H. Hepting, *Ethics and Usability Testing in Computer Science Education*, ACM SIGCSE Bulletin, Volume 38, Number 2, pages 76–80, 2006.
- S334 L. Carlson Berg, S. Longman, D. Hepting, and E. Doolittle, *Respectful Actions in Research: Aboriginal Adolescents Speaking Their Future*, The Delta Kappa Gamma Bulletin, Volume 72, Number 3, pages 23–29, 2006.
- S333 D. H. Hepting, *Computational Support for P-Creative Solutions*, Heron Island 2005: Sixth International Roundtable Conference Computational and Cognitive Models of Creative Design, Heron Island, Queensland, Australia, December, 2005.
- S332 T. J. Maciag and D. H. Hepting, *Analysis of User Classifiers for Personalization of Environmental Decision Support System Interfaces*, Intelligent Engineering Systems through Artificial Neural Networks, Volume 15, edited by C. H. Dagli, A. L. Buczak, D. L. Enke, M. J. Embrechts, and O. Ersoy, pages 767–776, 2005.
- S331 T. J. Maciag, D. H. Hepting, and D. Slezak, *Personalizing User Interfaces for Environmental Decision Support Systems*, Proceedings of the International Workshop on Rough Sets and Soft Computing in Intelligent Agent and Web Technologies. Held in conjunction with the 2005 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology, edited by D. Slezak, E. Menasalvas-Ruiz, C.-J. Liau, and M. Szczuka, pages 49–55, 2005.
- S330 D. Gerhard and D. H. Hepting, *A Framework for Personalization of Interactive Sound Synthesis*, Proceedings of the 2005 International Computer Music Conference (ICMC05), Barcelona, Spain, IEEE, 2005.
- S329 D. H. Hepting and T. J. Maciag, *Consumer Decision Support for Product Impact Analysis*, International Symposium on Environmental Software Systems 2005, Sesimbra, Portugal, 2005.
- S328 D. H. Hepting, *Decision Support for Local Environmental Impact Assessment*, Journal of Environmental Modelling and Software, Volume 22, Number 4, April 2007, pages 436–441. (Received 11 September 2005; received in revised form 20 October 2005; accepted 21 December 2005; available online 21 April 2006.)
- S327 R. Petry and D. H. Hepting, *Intellectual Capital, Open Source, and Sustainable Development: Implications for the Success of Canadian Firms in the New Economy*, Proceedings of the 26th McMaster World Congress on Intellectual Capital, Hamilton, Ontario, 19 pages, 2005.
- S326 D. Gerhard and D. H. Hepting, *Cross-modal parametric composition*, Proceedings of the 2004 International Computer Music Conference (ICMC04), Miami, Florida, IEEE, pages 505–512, 2004.
- S325 D. H. Hepting and C. Butz, *An Integrated Approach to Discovery in Complex Information Spaces*, Second International Workshop on Web-based Support Systems, edited by J. T. Yao, V. V. Raghavan, and G. Y. Wang, pages 67–74, 2004.
- S324 J. Uttaranakorn, D. H. Hepting, and S. Petty, *The Potential of Low-level Navigation in Narrative Learning Environments*, Third International Conference for Narrative and Interactive Learning Environments, edited by P. Brna, 2004.

- S23 J. Uttarakorn, D. H. Hepting, and S. Petty, *Symbol Mall*, SIGGRAPH 2004 Sketch, archived on the Conference Select CD-ROM and Full Conference DVD-ROM, 2004.
- S22 D. H. Hepting, O. Hoerber, and M. Berg, *A Unified Framework for the Presentation of Environmental Risk Information*, presented at ISESS 2004. Published as University of Regina Computer Science Technical Report CS2004-11.
- S21 D. H. Hepting and D. Gerhard, *Collaborative Computer-Aided Parameter Exploration for Music and Animation*, Proceedings of the Second International Conference on Computer Music Modelling and Retrieval, to appear in *Lecture Notes in Computer Science* series, 2004.
- S20 D. Gerhard, D. H. Hepting and M. McKague, *Exploration of the correspondence between visual and acoustic parameter spaces*, Proceedings of the 2004 Conference on New Interfaces for Musical Expression (NIME04), Hamamatsu, Japan, pages 96–99, 2004.
- S19 D. H. Hepting, *Interactive Evolution for Systematic Exploration of a Parameter Space*, Intelligent Engineering Systems through Artificial Neural Networks, Volume 13, edited by C.H. Dagli et al., pages 125–131, ASME Press, 2003.
- S18 D. H. Hepting and K. D. Arbuthnott, *The Implications of Verbal Overshadowing for Computer Interface Design*, University of Regina Computer Science Technical Report CS2003-10.
- S17 D. H. Hepting, *Towards a Visual Interface for Information Visualization*, Proceedings of the 6th International Conference on Information Visualization, IEEE Computer Society, pp. 295–302.
- S16 D. H. Hepting, W. Cao, and R. D. Russell, *An Exploratory Approach to Mathematical Visualization*, Proceedings of the 1998 Western Computer Graphics Symposium, pp 9–14.
- S15v D. H. Hepting. *Humble Aspirations*, Technical Slide Set, SIGGRAPH 97: 24th Annual Conference on Computer Graphics and Interactive Techniques, Los Angeles, 1997.
- S13 D. H. Hepting, F. D. Fracchia, J. C. Dill, and R. D. Russell, *A Personal Paradigm for Computer-Aided Visualization*, Workshop on New Paradigms in Information Visualization and Manipulation, Rockville, Maryland, November 16, 1996. Held in conjunction with the ACM Conference on Information and Knowledge Management.
- S12 D. H. Hepting, F. D. Fracchia, J. C. Dill, and R. D. Russell, *Cogito: a system for computer-aided visualization*, Unpublished Technical Sketch, SIGGRAPH 96: 23rd Annual Conference on Computer Graphics and Interactive Techniques, New Orleans, 1996. Published as CMPT TR 96-02, School of Computing Science, Simon Fraser University, Burnaby, British Columbia, Canada, August 1996.
- S11 D. H. Hepting, G. Derks, K. D. Edoh and R. D. Russell, *Qualitative Analysis of Invariant Tori in a Dynamical System*, in Visualization '95 Proceedings. Edited by G. M. Nielson and D. Silver. IEEE Computer Society Press, Los Alamitos, California, 1995, pp. 342-345.
- S10v D. H. Hepting, G. Derks, K. D. Edoh and R. D. Russell, *Qualitative Analysis of Invariant Tori in a Dynamical System*, Visualization '95 Video Proceedings, Volume 2. Visualization '95, Atlanta, 1995.
- S9 D. H. Hepting, W. Huang, and R. D. Russell, *A Visual Tool for Moving Mesh Numerical Methods*, published as CMPT TR 95-09, School of Computing Science, Simon Fraser University, Burnaby, British Columbia, Canada, November 1995.
- S8 D. H. Hepting, G. Derks, K. D. Edoh and R. D. Russell, *A Visual Analysis of Invariant Tori*, Proceedings of the Sixth Western Computer Graphics Symposium, Banff, Canada, March 20-22, 1995, pp. 23-25.
- S7 D. H. Hepting and J. C. Hart, *The Escape Buffer: Efficient Computation of Escape Time for Linear Fractals*, in Proceedings of Graphics Interface '95. Edited by W. A. Davis and P. W. Prusinkiewicz. Canadian Human-Computer Communications Society, 1995, pp. 204-214.
- S6 D. H. Hepting, *A Layered Approach for the Computerization of a Multimedia Archive*, CMPT TR 93-14, School of Computing Science, Simon Fraser University, Burnaby, British Columbia, Canada, December 1993.

- S5v D. H. Hepting, F. D. Fracchia, L. J. Woog, and R. F. Voss. *Three Dimensional Fractal Growth (DLA)*, Electronic Theatre Screening Room & Video Review, SIGGRAPH 92: 19th Annual Conference on Computer Graphics and Interactive Techniques, Chicago, 1992.
- S4v D. H. Hepting. *Fractal Emblem*, Technical Slide Set, SIGGRAPH 92: 19th Annual Conference on Computer Graphics and Interactive Techniques, Chicago, 1992.
- S3 D. H. Hepting, P. Prusinkiewicz, and D. Saupe. Rendering Methods for Iterated Function Systems, in *Fractals: from Folk Art to Hyperreality, SIGGRAPH 92 Course #12 Notes*. Edited by P. Prusinkiewicz. ACM SIGGRAPH, New York, 1992, pp. 3-1 to 3-41. (Reprinted from *Fractals in the Fundamental and Applied Sciences*. Edited by H.-O. Peitgen, J. M. Henriques, and L. F. Penedo. North-Holland, New York, 1991, pp. 183-224.)
- S2 D. H. Hepting. *Approximation and Visualization of Sets Defined by Iterated Function Systems*. M. Sc. Thesis, University of Regina, Regina, Saskatchewan, Canada, 1991.
- S1v D. H. Hepting and P. Prusinkiewicz. *Fractal Carrot Leaf*, Technical Slide Set, SIGGRAPH 90: 17th Annual Conference on Computer Graphics and Interactive Techniques, Dallas, 1990.

### Scholarly Posters and Presentations (Without Publication)

- P8 D. H. Hepting, R. Spring, and K. D. Arbuthnott, *Categorization of Faces: Salient Characteristics of Own-versus Other-Race Faces*, Brain, Behaviour and Cognitive Science (BBCS) 2006, Saskatoon, SK, June, 2006.
- P7 D. H. Hepting, *Personalized Adaptive Computational Experimentation*, Adaptivity and Beyond: Computational Methods for Solving Differential Equations, Vancouver, BC, August, 2005.
- P6 D. H. Hepting, D. Gerhard, J. Rathgaber, *Realtime Interactive Multimedia Performance*, SIGGRAPH 2005 Poster, archived on the Conference Select CD-ROM and Full Conference DVD-ROM, 2005.
- P5 K. Irwin, D. H. Hepting, and R. Viader Knowles, *The Bus Project: Departures and Arrivals*, Poster, 2nd ICT Network Forum (awarded best poster at the event), Regina, Canada, 2004.
- P4 D. H. Hepting and T. Maciag, *Decision Support for Personal Life Cycle Analysis*, Poster, International Society for Environmental Information Sciences, Regina, Canada, 2004.
- P3 D. H. Hepting, D. Gerhard, M. McKague, and P. Schmiedge, *Managing Parameter Spaces for Multimedia Composition*, SIGGRAPH 2004 Poster, archived on the Conference Select CD-ROM and Full Conference DVD-ROM, 2004.
- P2 D. H. Hepting and K. D. Arbuthnott, *The Implications of Verbal Overshadowing for Computer Interface Design*, Poster, SARMAC V (Fifth biennial meeting of the Society for Applied Research in Memory and Cognition), Aberdeen, Scotland, July 2–6, 2003.
- P1 K. Edoh, D. H. Hepting, and R. D. Russell, *Visualization as a Qualitative Tool for the Computation of Invariant Tori*, Presentation, Third SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 21, 1995.

### Popular Publications

- O5 Various entries, *Encyclopedia Saskatchewan*, Canadian Plains Research Centre, 2005.
- O4 The Fractal Nature of Life's Journey, *Textshop: a journal of experimental writing*, University of Regina, ISSN 1188-7885, Number 5, Winter 1998, pp. 10-11.
- O3 D. H. Hepting, A Personal Adventure: SIGGRAPH 96, *Computer Graphics*, Volume 31, Number 3, August 1997, pp. 22-23.
- O2 D. H. Hepting, *Fractals: A 1996 Calendar. Computer-generated images based on the fractal geometry of Benoit B. Mandelbrot*, Universe Publishing, New York, 1995.
- O1 D. H. Hepting, *Fractals: A 1995 Calendar. Computer-generated images based on the fractal geometry of Benoit B. Mandelbrot*, Universe Publishing, New York, 1994.

## Selected Presentations, Exhibitions, Publications of Images, and Performances

- D. H. Hepting, *LOFO = LOcal FOod*, Saskatchewan Vegetable Growers' Association Annual General Meeting, Saskatoon, November 12, 2006.
- D. H. Hepting, *Multimedia Instruments*, Re:mote Regina, Neutral Ground, Regina, July, 2005.
- D. Hepting et al., *Challenging Bodies*, performed June 25, 2005 in the Schumiacher Open Stage, Riddell Centre, University of Regina and reprised March 4, 2006 in the Atrium at the Wascana Rehabilitation Centre.
- D. Hepting et al., *Challenging Bodies*, Banff New Media Institute Virtual Bootcamp, TRLabs Regina, November, 2004.
- K. Irwin, D. H. Hepting, and R. Viader Knowles, *Departures and Arrivals: Assessing Interdisciplinarity Through The Bus Project*, panel presented as part of the Faculty of Fine Arts Lecture Series, Regina, Canada, 2004. The panel was reprised as part of the University of Regina Humanities Research Institute mini-conference on Evaluating Research Performance in the Humanities, Regina, Canada, 2004.
- *Internet Research Issues*, Presentations to University of Regina Research Ethics Board, June, 2002 and October, 2004.
- K. Irwin et al., *The Bus Project*, SPASM II Festival, Regina and Saskatoon, Saskatchewan, May 27 – June 4, 2004.
- *Author's Day*, University of Regina Bookstore, October 30, 2002.
- Pilot episode of *Killer App* television series, 20th Century Fox, 1998.
- Cover, *Textshop*, Number 5, Winter 1998, University of Regina.
- *Research Matters*. Centre for Systems Science at Simon Fraser University. Postcard deck. 1997.
- 10th Annual Faculty, Staff, Student Exhibition, Simon Fraser University, November 18 – December 13, 1996.
- *Mathematical visualization*, Seminar, University of Wollongong, Wollongong, Australia. January 19, 1996. P. Castle, host.
- MATH-ART. Exhibit at the Teck Gallery, Simon Fraser University Harbour Centre Campus. December 9, 1995 – January 24, 1996. Organized by E. Gibson, M. Dubiel, K. Heinrich, and D. Hepting.
- M. Scott. Paint by Numbers. *The Vancouver Sun*, pages C1,C9, December 9, 1995.
- D. A. Thomas, *Math Projects in the Computer Age: Projects for Young Scientists*, Franklin Watts, New York, 1995.
- *Fractals and Art*, Presentation, Fractal Friday, Centre for Experimental and Constructive Mathematics, Simon Fraser University, Burnaby, March 24, 1995.
- *Fractals: More Than Just Pretty Pictures*, Presentation, 1993 World of Math Conference, Simon Fraser University, Burnaby, June 22, 1993.
- F. K. Musgrave, *Fractals: A 1993 Calendar. Computer-generated images based on the fractal geometry of Benoit B. Mandelbrot*, Universe Publishing, New York, 1992.
- Cover, *Dr. Dobb's Journal*, 16(4), April, 1991.
- *New York Notes: Music and Fractals* by B. B. Mandelbrot and Charles Wuorinen, debuted at the Solomon R. Guggenheim Museum, April 19, 1990.
- J. V. Maheiros. A Natureza Artificial. *HOJE E AMANHÃ*, pp. 8-10, supplement to *PÚBLICO*, no. 102, June 14, 1990.
- P. Prusinkiewicz and A. Lindenmayer. *The Algorithmic Beauty of Plants*. Springer-Verlag, New York, 1990.
- P. Prusinkiewicz. About the Cover: Exploring the Beauty of Plants. *IEEE Computer Graphics and Applications*, 10(2):3, March, 1990.
- S. Strauss. To be or not to be? *The Globe and Mail*, pp. D1-D4, no. 43805, April 28, 1990.

## Service

- 2006-2007 Member, Program Committee, Computing and Cognition (CC2007).
- 2006-2007 Session co-organizer and co-chair, Human Factors in Enviromatics, International Symposium on Environmental Software Systems (ISESS 2007).
- 2006-2007 Member, Program Committee, Joint Rough Sets Symposium (JRS07).
- 2004- Member, International Programme Committee for Co-ordinated Multiple Views in Visualization (CMV).
- 2004- Member, IFIP Working Group 5.11 (Enviromatics).
- 2004- Mentor, Luther College, Regina
- 2003- Participant, Regina REDA Cluster on Film, Television, and Interactive Media.
- 2003 Posters and Demos Chair, Graphics Interface 2003 conference.
- 1998 Conference Co-chair (with M. Lantin and L. Bartram), 1998 Western Computer Graphics Symposium, Whistler, BC, April 23 – 26.
- 1996-2005 Referee.
- ACM SIGCHI conference: 2005 (papers, works-in-progress).
  - Computer Music Journal.
  - Applied Cognitive Psychology.
  - Journal of Graphics Tools.
  - Information Visualization.
  - HICSS-36: Hawaii International Conference on System Sciences 2003.
  - Chaos and Graphics section of Computer Graphics World.
  - Cyberworld conference: 2003.
  - Coordinated Multiple Views: 2003
  - ACM SIGCHI conference: 2003 (posters).
  - *Computer Graphics and Applications*, Volume 18, Number 4. Special issue on information visualization edited by N. Gershon and S. G. Eick, July/August 1998.
  - InfoVis symposium: 1997.
  - ACM SIGGRAPH conference: 1997, 2006.
  - Eurographics conference: 1997.
  - Graphics Interface conference: 1996, 2001, 2003, 2004.
- 1997 Reviewer for *Procedural Elements for Computer Graphics, 2nd Edition*, by D. F. Rogers. McGraw-Hill, 1998.
- 1994-97 Treasurer. Vancouver ACM SIGGRAPH Professional Chapter.
- 1994-96 Student volunteer.
- CHI 96 conference.
  - Visualization 94, Visualization 95 conferences.
  - SIGGRAPH 94 conference.
- 1987-88 Chair, University of Regina Student Chapter of the ACM.

## Administrative Duties

Member, Advisory Committee on Research and Instructional Computing (ACRIC)

Graduate Program Coordinator for Computer Science

Member, Executive of Council

Dean's (Fine Arts) Representative on the Department of Media Production and Studies Search Committee (2004).

Member, Research Ethics Board, University of Regina.

Faculty of Science representative to the Faculty of Business Administration.

## **Affiliations**

Member, Laboratory for Computational Discovery, University of Regina.

Member, Neutral Ground Artist Run Centre and Gallery, Regina, Saskatchewan.

Member, Canadian Information Processing Society (CIPS), and special interest group Canadian Human-Computer Communications Society (CHCCS).

Member, Association for Computing Machinery (ACM), and special interest groups for Computer Graphics (SIGGRAPH) and Human-Computer Interaction (SIGCHI).

Member, Institute of Electrical and Electronics Engineers (IEEE) Computer Society.

Member, Canadian Society for Brain, Behaviour and Cognitive Science.

Member, Society for Applied Research in Memory and Cognition.