#### **COLIN POTTS**

#### GEORGIA INSTITUTE OF TECHNOLOGY OFFICE OF THE PROVOST & SCHOOL OF INTERACTIVE COMPUTING

#### **PROFESSIONAL BIOSKETCH**

Colin Potts is the Vice Provost for Undergraduate Education and Professor of Interactive Computing at the Georgia Institute of Technology. The Office of Undergraduate Education (http://oue.gatech.edu), which reports to him, consists of units that provide curricular and co-curricular services and programs for undergraduate students. The organization is currently staffed by 61 faculty and staff members and has a budget of over \$6 million. Dr. Potts is a member of the President's Cabinet, the Strategic Planning Steering Committee, the Institute Promotion and Tenure Committee, several standing committees of the faculty, the Council for General Education of the University System of Georgia and many ad hoc groups at the institute and system levels. He has led or convened task forces on student mental health, the academic calendar, and curricular flexibility. He has pioneered the development of living-learning communities at Georgia Tech and was responsible for the 2015 SACSCOC accreditation Quality Enhancement Plan, which is focused on community engagement and sustainability. Dr. Potts has played a leading role in the development of the last two strategic plans (2010 and 2020), the Commission on the Next in Education, and the planning for the reentry to campus in the Fall semester, 2020. He is a member of the Georgia Tech Covid-19 Task Force, the Covid Recovery Health and Safety Group, and co-chairs the Restarting Academic Affairs Activities Task Force, with special responsibility for articulating student/faculty expectations.

Dr. Potts is the 2019-2021 President of the Reinvention Collaborative, a coalition of 79 universities dedicated to undergraduate education, and he has been on the Executive Board of that organization since 2015.

Potts has a distinguished record as a scholar in the interdisciplinary fields of software engineering, human-computer interaction, software privacy, the philosophy of information systems, and most recently ethics education and community engagement.

An award-winning teacher, Potts has taught in the fields of cognitive science, professional ethics, introductory computer science, human-computer interaction, and software engineering. He has conducted nine study-abroad programs, in Oxford and Barcelona.

#### I. EARNED DEGREES

Ph.D. (1983)	Sheffield University, U.K. (Psychology)
B.Sc. (1977)	University of Durham, U.K. (Psychology)

#### **II. EMPLOYMENT HISTORY**

2017-present	Professor, Interactive Computing	Georgia Institute of Technology, Atlanta, GA
2012-present	Vice Provost for Undergraduate Education	Georgia Institute of Technology, Atlanta, GA
1992-2017	Associate Professor, Computing (1992- 2006), Interactive Computing (2006-2017)	Georgia Institute of Technology, Atlanta, GA
1991-1992	Sr. Member Tech. Staff	Microelectronics and Computer Technology Corporation, Austin, TX
1987-1991	Member Tech. Staff	Microelectronics and Computer Technology Corporation, Austin, TX
1984-1987	Lecturer (US equiv.: Asst. Prof.)	Imperial College of Science and Technology, London, UK
1982-1984	Research Assistant (US equiv.: postdoctoral research fellow)	Imperial College of Science and Technology, London, UK
1980-1982	Programmer/Analyst	Scicon Consultancy International, London, UK

#### III. NOTABLE ACHIEVEMENTS

- Reinvention Collaborative, President, 2019
- University System of Georgia, appointment to the statewide committee on Redesigning the General Education Curriculum, 2019.
- Georgia Tech, appointment by the President to the Strategic Planning Steering Committee, 2019.
- Georgia Tech, appointment by the President as Chair of the *Path Forward* Committee on Academic Stress and Wellbeing, 2017.
- Virginia Center for the Creative Arts, *Prix Résidence Moulin à Nef*, 2015 (with Karen Head)
- Georgia Tech Student Ambassadors *Modern-Day Aristotle* award, 2014
- Georgia Tech Undergraduate House of Representatives "Dean James E. Dull" Administrator of the Year award, 2014
- Georgia Tech Center for the Enhancement of Teaching and Learning/GT Alumni Student Ambassadors *Thank A Teacher Program* award, 2013
- Georgia Tech Geoffrey G. *Eichholz Faculty Teaching Award*, 2012
- Georgia Tech Center for the Enhancement of Teaching and Learning/GT Alumni Student Ambassadors *Thank A Teacher Program* award, 2012 (five awards)
- Georgia Tech Center for the Enhancement of Teaching and Learning/GT Alumni Student Ambassadors *Thank A Teacher Program* award, 2011
- Member, Georgia Tech Strategic Planning team, 2010. Led the design exploration for initiatives curricular flexibility.
- Georgia Tech Hesburgh Award Teaching Fellowship, 2010

- Georgia Tech College of Computing, *William "gus" Baird Faculty Teaching Award*, 2010
- International Conference on Requirements Engineering, *Most Influential Paper from RE'99* award, 2009
- Lambda Sigma sophomore honors society teaching excellence appreciation award, 2008
- NTT Laboratories Director's Prize, for Tuiqiao (see IV.C2), 1994

#### IV.RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES

## A. PUBLISHED BOOKS, BOOK CHAPTERS, AND EDITED VOLUMES Refereed Book Chapters

- C. Potts, Supporting Software Design: Integrating Design Methods and Design Rationale, in T. P. Moran & J. M. Carroll (Eds.), <u>Design rationale: Concepts, techniques, and use</u>. Hillsdale, NJ: Lawrence Erlbaum Associates, 1996.
- C. Potts, The Other Interface: Specifying and Visualising Computer Systems in G.C. Van Der Veer, T.R.G. Green, J.-M. Hoc and D.M. Murray (eds.) <u>Working With Computers:</u> <u>Theory Versus Outcom</u>e, Academic Press, 1988

#### **Edited Volumes**

- C. Clegg, P. Warr, T. Green, A. Monk, N. Kemp, G. Allison and M. Lansdale in collaboration with C. Potts, R. Sell and I. Cole, (Jointly written by named authors based on questionnaires constructed equally by authors and collaborators), <u>People and Computers</u>, Ellis Horwood, 1988.
- C. Potts (ed.) <u>Proceedings of the Software Process Workshop</u>, Egham UK, 1984, IEEE Comp. Soc. Press, 1984.

# **B.** REFEREED PUBLICATIONS AND SUBMITTED ARTICLES

# **Published and Accepted Journal Articles**

- Schiff, Daniel, S., Emma K. Logevall, Jason D. Borenstein, Wendy Newstetter, Colin Potts and Ellen Zegura, "Linking personal and professional social responsibility development: Influences and inhibitors in early undergraduate education," <u>Journal of Engineering</u> <u>Education</u> (submitted)
- Carlos Jensen, Colin Potts, and Christian Jensen. "Privacy Practices of Internet Users: Selfreport versus Observed Behavior" <u>International Journal of Human Computer Studies</u> (special issue on HCI Research in Privacy and Security). July, 2005.
- A.I. Antón and Colin Potts. Functional Paleontology: The Evolution of User-Visible System Services, IEEE Transactions on Software Engineering, 29(2), pp. 151-166, February 2003.
- A.I. Antón and C. Potts. A Representational Framework for Scenarios of Systems Use, <u>Requirements Engineering Journal</u>, Springer-Verlag, 3(3-4), pp. 219-241, 1999.
- C. Potts and I. Hsi., Abstraction and Context in Requirements Engineering: Toward a Synthesis, <u>Annals of Software Engineering</u> 9: 1-39, 1997.
- C. Potts and L. Catledge. Collaborative Conceptual Design: A Large Software Project Case Study. <u>Computer-Supported Cooperative Work: The Journal of Collaborative Computing</u>, <u>5:</u>414-445, 1996.
- C. Potts, K. Takahashi and A. Anton, Inquiry-Based Requirements Analysis, <u>IEEE Software</u>, March, 1994.
- C. Potts, Software Engineering Research Revisited, <u>IEEE Software</u>, September, 1993, pp. 19-28.

• J. Kramer, K. Ng, C. Potts and K. Whitehead, Tool Support for Requirements Analysis, <u>Software Eng. Journal.</u>, May 1988, pp. 86-96.

# **Conference Presentation with Proceedings (Refereed)**

- Erwin, A, J. Borenstein, W. Newstetter, C. Potts and E. Zegura <u>Undergraduate STEM</u> <u>Students and Community Engagement Activities: Initial Findings from an Assessment of</u> <u>their Concern for Public Well-being</u>, Americal Society of Engineering Education, Salt Lake City, UT, June 2018.
- Erwin, A, J. Borenstein, W. Newstetter, C. Potts and E. Zegura, <u>Community Engagement and Ethics : Embarking on a Transformational Narrative</u>. Annual Conference of the Association for Practical and Professional Ethics, Chicago, IL, April 2018.
- Jensen, Carlos and Colin Potts. Experimental Evaluation of a Lightweight Method for Augmenting Requirements Analysis, Proc. Workshop Empirical Assessment of Software Engineering Languages and Technologies (WEASELTech), Atlanta, November, 2007.
- Potts, Colin "Re-framing requirements engineering" <u>RE'06 Int. Symposium on Requirements</u> <u>Engineering</u>, Minneapolis, August 2006.
- Carlos Jensen, Colin Potts. "Privacy Policies as Decision-Making Tools: A Usability Evaluation of Online Privacy Notices" <u>Proceedings of ACM Conference on Human Factors</u> <u>in Computing Systems: CHI 2004</u>, Vienna, Austria, April 2004. pp 471-478.
- Cossentino, Massimo and Colin Potts "A CASE tool supported methodology for the design of multi-agent systems" <u>Proc. of the 2002 International Conference on Software Engineering</u> <u>Research and Practice (SERP'02)</u> (Las Vegas, USA, June, 2002
- Ohnishi, Atsushi and Colin Potts, "Grounding Scenarios in Frame-Based Action Semantics" <u>Proc. Seventh International Workshop on Requirements Engineering: Foundation for</u> <u>Software Quality</u>, June 4-5, 2001, Interlaken, Switzerland.
- Anton, A., Julia B. Earp, Colin Potts, Thomas A. Alspaugh The Role of Policy and Stakeholder Privacy Values in Requirements Engineering, <u>IEEE Fifth International</u> <u>Symposium on Requirements Engineering (RE'01)</u>, Toronto, Canada, pp. 138-145, 27-31 August 2001.
- Potts, C. Metaphors of Intent. <u>IEEE Fifth International Symposium on Requirements</u> <u>Engineering (RE'01)</u>, Toronto, September, 2001
- Antón, A.I. and C. Potts Functional Paleontology: System Evolution as the User Sees It, <u>IEEE International Conference on Software Engineering (ICSE '01)</u>, Toronto, Canada, May 2001.
- Hsi, I. and C. Potts (2000). <u>External Complexity and Evolution of Software: Reverse</u> <u>Engineering without Code</u>. Proc. Int. Conf. Software Maintenance: San Jose, CA.
- Potts, C. ScenIC: A Strategy for Inquiry-Driven Requirements Determination, <u>IEEE Fourth</u> <u>International Symposium on Requirements Engineering (RE'99)</u>, University of Limerick, Ireland, pp. 58-65, 7-11 June 1999.
- Anton, A. I. & C. Potts. The Use of Goals to Surface Requirements for Evolving Systems. International Conference on Software Engineering (ICSE'98), Kyoto, April 1998.
- G. Abowd, C. Ertmann-Christiansen, A. Goel, D. Jerding, M. McCracken, M. Moore, J.W. Murdock, C. Potts, S. Rugaber and L. Wills. MORALE: Mission-Oriented Architectural Legacy Evolution. <u>Proc. Int. Conf. Software Maintenance</u>, Bari, Italy, October 1997. IEEE CS Press.

- Potts, C. Fitness for Use: The System Quality that Matters Most. <u>REFSQ'97: Third</u> <u>Int.Workshop on Requirements Engineering: Foundation for Software Quality.</u> Barcelona, Spain: June 16-17, 1997
- Potts and W. Newstetter. Naturalistic Inquiry and Requirements Engineering: Reconciling their Theoretical Foundations. <u>Proc. 3rd International Symposium on Requirements</u> <u>Engineering (RE'97)</u>, Annapolis, MD, January 7-10, 1997. IEEE Computer Society Press, pp. 118-127.
- L. Catledge and C. Potts, Collaboration during Conceptual Design, <u>Proc. 2nd Int. Conf.</u> <u>Requirements Eng.</u>, (ICRE'96) Colorado Springs, CO, 1996.
- K. Takahashi, C. Potts, V. Kumar, K. Ota and J. Smith, Hypermedia Support for Collaboration in Requirements Analysis, <u>Proc. 2nd Int. Conf. Requirements Eng. (ICRE'96)</u>, Colorado Springs, CO, 1996.
- Potts, C. Using Schematic Scenarios to Understand User Needs, <u>Proc. Symp. Designing</u> <u>Interactive Systems (DIS'95)</u>, Ann Arbor, MI, August, 1995, ACM.
- C. Potts, K. Takahashi, J. Smith, and K. Ota, An Evaluation of Inquiry-Based Requirements Analysis for an Internet Service, <u>Proc. RE'95: Second International Symposium on</u> <u>Requirements Engineering</u>, York, UK, March, 1995, IEEE Computer Society Press, 1995.
- A.Anton, M.McCracken and C.Potts, Scenarios and Goals in Business Process Reengineering, <u>Sixth Conference on Advanced Information Systems Engineering (CaiSE'94)</u>, Utrecht, Netherlands, May, 1994.
- C.Potts, K.Takahashi and A.Anton, Inquiry-Based Scenario Analysis of System Requirements, <u>Proc. International Conference on Requirements Engineering (ICRE'94</u>), Colorado Springs, CO, April, 1994
- M. Moore and C. Potts, Learning by Doing: Goals and Experiences of Two Software Engineering Project Courses, <u>Proc. 7th Conf. Software Engineering Education</u>, San Antonio, January, 1994.
- C. Potts and K. Takahashi, An Active Hypertext Model for System Requirements, <u>Proc. 7th</u> <u>Int. Workshop on Software Specification and Design (IWSSD7)</u>, Redondo Beach, December, 1993.
- C. Potts, Choices and Assumptions in Requirements Definition, <u>Proc. RE'93: 1st Int.</u> <u>Symposium on Requirements Eng.</u>, San Diego, January, 1993, IEEE Comp. Soc. Press, 1993.
- M. Lubars, C. Potts and C. Richter, Developing Initial OOA Models, <u>Proc. 15th Int. Conf.</u> <u>Software Eng.</u>, Baltimore, May, 1993, IEEE Comp. Soc. Press, 1993.
- M. Lubars, C. Potts and C. Richter, Review of the State of the Practice in Requirements Engineering, <u>Proc. RE'93: 1st Int. Symposium on Requirements Eng.</u>, San Diego, January, 1993, IEEE Comp. Soc. Press, 1993.
- M. Lubars, L.G. Meredith, C. Potts and C. Richter, Object-Oriented Analysis for Evolving Systems, <u>Proc. 14th Int. Conf. Software Eng.</u>, Melbourne, Australia, May, 1992, ACM, 1992.
- C. Potts, Seven (Plus or Minus Two) Challenges for Requirements Research, <u>Proc. 6th Int.</u> <u>Workshop on Software Specification and Design (IWSSD6</u>), Como, Italy, October, 1991, IEEE Comp. Soc. Press, 1991.
- C. Potts, Expediency and Appropriate Technology: An Agenda for Requirements Engineering Research in the 1990s, in A. Van Lamsweerde and A. Fugetta (eds.) <u>ESEC'91:</u> <u>Proc. 3rd. Eur. Software Eng.</u> Conf., Milan, October, 1991" Springer- Verlag, LNCS 550, 1991.
- C. Potts, A Generic Model for Representing Design Methods, <u>Proc. 11th Int. Conf. Software</u> <u>Eng.</u>, Pittsburgh, IEEE Comp. Soc. Press, 1989.
- C. Potts and G. Bruns, Recording the Reasons for Design Decisions, <u>Proc. 10th Int. Conf.</u> <u>Software Eng.</u>, Singapore, IEEE Comp. Soc. Press, 1988.

- A.C.W. Finkelstein and C. Potts, Building Formal Specifications Using Structured Common Sense, <u>Proc. 4th Int. Workshop Software Specification and Design</u>, Monterey, CA, IEEE Comp. Soc. Press, 1987.
- A.C.W. Finkelstein and C. Potts, Structured Common Sense: The Elicitation and Formalization of System Requirements, in D. Barnes and P. Brown (eds.) *Software Engineering 86*, (Proceedings of the British Comp. Soc. and IEE Conf. Software Eng.), Peter Peregrinus, 1986.
- R.J. Cunningham, A.C.W. Finkelstein, S.J. Goldsack, T.S.E. Maibaum and C. Potts, Formal Requirements Specification: The FOREST Project, <u>Proc. 3rd Int. Workshop on Sofware Specification and Design</u>, London, IEEE Comp. Soc. Press, 1985.
- C. Potts, Understanding Complex Descriptions, in G.C. Van Der Veer, M.J. Tauber, T.R.G. Green and P. Gorny (eds.), <u>Readings on Cognitive Ergonomics: Mind and Computers</u>, (Proc. 2nd Eur. Conf. Cognitive Ergonomics, Gmunden, Austria, September, 1984), Springer-Verlag, LNCS 178, 1984.
- C.Potts, A.J. Bartlett, B.H. Cherrie and R.I. Maclean, Discrete-Event Simulation as a Means of Validating JSD Design Specifications, <u>Proc. 8th Int. Conf. Software Eng.</u>, London, 1984.
- R.I. Maclean, C. Potts, A.J. Bartlett, B.H. Cherrie, Validation: A disciplined approach, <u>Proc.</u> <u>Process Workshop</u>, Egham UK, IEEE Comp. Soc. Press, 1984.

# **Other refereed material**

- Potts, Colin, "Modes of Correspondence between Information Systems and the World" <u>2<sup>nd</sup></u> <u>Int. Workshop on Philosophical Foundations of Information Systems Engineering</u>, Luxembourg June 2006.
- Hobbs, R. and C. Potts, Hyperscenarios: A Framework for Active Narrative. Proc. ACM Southeastern Conference, Clemson SC, March 2000.
- Potts, C. Tutorial: Inquiry-Driven Requirements Determination, <u>International Conference on</u> <u>Software Engineering (ICSE'99)</u>, Los Angeles, May, 1999. IEEE CS Press.
- Potts, C. Tutorial: Scenario-Based Requirements Determination. <u>Proc. Conf. Industrial</u> <u>Requirements Engineering (CEIRE'98)</u>, October, 1998. Hammersmith, UK. British Computer Society.
- Potts, C. Tutorial: Requirements for Evolving Systems. <u>International Conference on Software</u> <u>Engineering (ICSE'98)</u>, Kyoto, April 1998. IEEE CS Press.

# C. OTHER PUBLICATIONS AND CREATIVE PRODUCTS Exhibitions, Competitions and Performances, Professional Practice & Studio Work

- Mason Fine Art, Southern Street Photography Group Show, 2019
- Atlanta Photography Gallery, *Reverie*, 2019
- Virginia Center for the Creative Arts, Moulin à Nef, Auvillar, France, *Photographie et Poésie*, 2015 (with Karen Head)
- Atlanta Hartsfield-Jackson Airport, Atlanta Photography Group Airport Group Show, 2014
- Cover artwork & author photographs for several poetry & short story collections, 2009-2014
- Georgia Tech, Arts@Tech, Japan, Age and Gender, 2012
- Atlanta Photography Group, Ted & Gloria Maloof Gallery, 2005
- Callanwolde Fine Arts Gallery, Mild and Bitter, 1999
- Backdrop Gallery, Atlanta, Japan: Age and Gender, 1998
- Atlanta Photography Gallery, *Pilgrims and Visionaries*, 1995 (with Victor Balaban)

# Software, Patents, Designs, Compositions, Scholarly Editions

- ScenIC View, an interactive scenario editing tool for creating and editing ScenIC scenarios.
- EColabor, a team-based environment for conducting Inquiry Cycle discussions.
- Synthesis, a collaborative pre-writing and planning tool for team projects. Designed by A.Badre, J.Bolter and C.Potts and implemented by J.Bolter and T.Kane.
- Tuiqiao, an active hypertext annotation tool for supporting the elaboration of system requirements, designs and plans. Designed by C.Potts and K.Takahashi.
- *VERDI (Visual Environment for Raddle Distributed Systems Designs)*, a visual design and simulation/animation tool for modeling distributed systems designs, communication protocols, and parallel computations. Designed and implemented by M. Graf, C. Richter, J. Brumfield, C. Potts, V.Y. Shen and G. Rein.
- *VIM (VERDI Information Manager)*, an integration of VERDI and GERM for managing VERDI design refinements and alternatives, model management, and design rationale.
- *Analyst Guidance System*, an active help and process support system for the Analyst Workbench (SD-Scicon), designed by C. Potts and K. Whitehead.

#### Posters, Artifacts, Datasets and Other Non-Refereed Publications

- Potts, C., E. Zegura, J. Borenstein, W. Newstetter, <u>Institutionalizing Community</u> <u>Engagement: Effects on STEM Students' Ethical Perceptions</u>, Workshop on Ethics and Responsible Innovation in STEM, Raleigh, NC,. March, 2018
- Potts, C. <u>Educational Innovation: An Institutional Perspective</u>, Georgia Association for Institutional Research, Planning, Assessment, and Quality: Annual Conference, Macon, GA, April 2018
- Kirkman, R., K. Fu and C. Potts, <u>Ethics and Design: Integrating Ethics Education into</u> <u>Engineering Capstone Courses</u>, Center for Engineering Ethics and Society/National Academy of Engineering Workshop on Ethics in Science and Engineering, Washington, D.C., January 2017.
- Potts, C. <u>Discovery, and the Development of Professional Identities</u>, Reinvention Collaborative Undergraduate Vice Provosts Network meeting, Arlington, VA, November 2016.
- Potts, C., E. Zegura, J. Borenstein, W. Newstetter, <u>Institutionalizing Community</u> <u>Engagement: Effects on STEM Students' Ethical Perceptions</u>, NSF CCI STEM Planning Meeting, Arlington, VA. September, 2016
- Potts, C. and M. Tullier, <u>The Role of Universities in Preparing Students for the Global</u> <u>Workforce</u>, Universum Conference on the Future of Talent, Stockholm, June 2016.
- Potts, C. <u>Social Sustainability and Education</u>. Integrated Network for Social Sustainability Workshop, Atlanta, GA, June 2016
- Potts, C. <u>General Education and Curricular Complexity at Georgia Tech</u>, University System of Georgia LEAP Workshop, Athens, GA, April 2016
- Potts, C. <u>Design Rationale and Creativity: A Position Paper in Six Parts</u>, NSF Workshop on Design Rationale and Creativity, PA State Univ., June, 2008.
- Potts, C. <u>Researching requirements: A Feature Perspective</u>. NSF workshop on Design Requirements Engineering, NSF Science of Design Program, Case Western Reserve, June 3-6, 2007.
- Potts, C. <u>Wiggle Room: ...or smoothing the edges of square-pegged descriptions so that they</u> <u>fit into round-holed worlds</u>, IFIG Working Group 2.9 (Requirements Engineering) working meeting, Duck Key, FL: February 2002.

- Potts, C. <u>Everything a Requirements Engineer Ever Wanted to Know about Cognitive</u> <u>Linguistics...But was Afraid to Ask</u>. RE'01 Program Committee Workshop, London, April 2001.
- C. Potts. Intrusion Scenarios for Security Requirements Engineering. <u>Proc. Symp.</u> <u>Requirements Engineering for Information Security</u>, Indianapolis, March 2001.
- Annie I. Antón and Colin Potts, Requirements Engineering in the Long-Term: Fifty Years of Telephony Feature Evolution, <u>International Workshop on Feedback and Evolution in</u> Software and Business Processes (FEAST 2000), London, UK, 10-12 July 2000.
- C. Potts, <u>Feature evolution and variance</u>, IFIG Working Group 2.9 (Requirements Engineering) working meeting, Duck Key, FL: January 1999.
- C. Potts, <u>Determining the Requirements for Evolving Systems</u>. (Refereed tutorial), Conf. Advanced Information Systems Engineering. Barcelona, Spain: June 18-20, 1997
- C. Potts, <u>Mission-Oriented Legacy Architecture Evolution</u>. Workshop on Software Migration at Int. Conf. Software Engineering, Boston, MA. May 11-17, 1997
- C. Potts, <u>Patterns of Intent and Interaction</u>. Invited paper presented at CHI'97 Workshop on Patterns of Interaction, Atlanta, GA. March, 1997.
- C. Potts, <u>What Requirements Model Model and What they Ignore</u>. Invited paper presented at IFIP Working Group 2.9 (Requirements Engineering) working meeting, Eugene, OR, June, 1996.
- C. Potts, <u>Fieldwork in Requirements Engineering</u>, invited paper presented at IFIP Working Group 2.9 (Requirements Engineering) working meeting, Bramshill, UK, March, 1995.
- C. Potts, <u>Obstacles to Happy Endings</u>. Informal presentation at IFIP Working Group 2.9 (Requirements Engineering) working meeting, Bramshill, UK, March, 1995.
- C. Potts, Goals, Policies and Scenario-Driven Elaboration, NSF/NIST Workshop on Computational Modeling of Policy, George Mason Univ., December, 1994.
- C.Potts, <u>Proactive Usability Evaluation</u>, ARPA Workshop on Evaluation of Interactive Human-Computer Interfaces, MITRE Corporation, March, 1994.
- C. Potts, I Never Knew My Requirements were Object-Oriented until I Talked to my Analyst, (Introduction to refereed panel). <u>Proc. RE'93: 1st Int. Symposium on Requirements Eng</u>., San Diego, January, 1993, IEEE Comp. Soc. Press, 1993.
- C. Potts, <u>Object-Oriented Software Engineering: Hope, Hype or Hip?</u> panel presentation given at 15th Int. Conf. Software Engineering, Baltimore, May, 1993.
- C. Potts and K. Takahashi, <u>An Active Hypertextual Model for Requirements Definition</u>, presentation, poster and demonstration given at Human-Computer Interaction Consortium Winter Workshop, Atlanta, January, 1993.
- C. Potts, <u>Requirements Modeling for Evolving Systems</u>, presented at 4th Int. Symp. on Future Software Environments, Sydney, Australia, May, 1992
- C. Potts, <u>Requirements Modeling for Evolving Systems: The Role of Object- Oriented</u> <u>Analysis</u>, presented at ESPRIT Project 2537 ("Icarus") Informal Workshop on Formal Requirements Engineering, Habay-la-Neuve, Belgium, October, 1991.
- M. Lubars, L.G. Meredith, C. Potts, C. Richter, <u>Object-Oriented Analysis and Domain</u> <u>Models</u>, presented at Workshop on Domain Modeling in Software Eng., 13th Int. Conf. Software Eng., Austin, TX, May, 1991.
- C. Potts, <u>Seven (Plus or Minus Two) Challenges for Requirements Analysis Research</u>, presented at Carnegie-Mellon Univ., Software Engineering Institute Workshop on Requirements Engineering and Analysis, Pittsburgh, October, 1991.
- C. Potts, <u>Issue-Based Design</u>, presented at Software Engineering Research Center, Utrecht, Netherlands, Annual Software Engineering Symposium, November, 1990.

- C. Potts, <u>Distributed Computing Research at MCC</u>, presented at DARPA Workshop on Distributed, Intelligent Control Systems, Pacifica, CA, 1990.
- C. Potts, <u>Representing Recurrent Issues and Decisions in Software Design Methods</u>, presented at AAAI Spring Symp. on Artificial Intelligence and Software Engineering, Stanford, 1989 (also published as MCC Technical Report STP-083-89).
- C. Potts, <u>Understanding Specifications</u>, presented at 2nd Int. Workshop on Software Specification and Design, Orlando, Fla., 1984.
- B.H. Cherrie, C. Potts, R.I. Maclean and A.J. Bartlett, <u>The Role of Validation in Software</u> <u>Development</u>, presented at 2nd Int. Software Process Workshop, April, 1985.
- Carlos Jensen, Joe Tullio, Colin Potts, Elizabeth D. Mynatt, <u>STRAP: A Structured Analysis</u> <u>Framework for Privacy</u>, Georgia Institute of Technology, Graphics, Visualization and Usability Center Technical Report GIT-GVU-05-02, 2005
- Carlos Jensen, Colin Potts, <u>Private Policies Examined: Fair Warning or Fair Game?</u> Georgia Institute of Technology, Graphics, Visualization and Usability Center Technical Report GIT-GVU-03-04, 2003
- Chuck Eastman, Idris His and Colin Potts, <u>Coordination in Multi-Organization Creative</u> <u>Design Projects</u>, Georgia Institute of Technology, Graphics, Visualization and Usability Center Technical Report GIT-GVU-98-36, 1998
- Reginald L. Hobbs and Colin Potts, <u>Towards a Framework for Hypermedia Scenarios</u>, Georgia Institute of Technology, College of Computing Technical Report, GIT-CC-98-06, 1998.
- Anind K. Dey, Lara D. Catledge, Gregory D. Abowd and Colin Potts, <u>Developing Voice-only Applications in the Absence of Speech Recognition Technology</u>, Georgia Institute of Technology, Graphics, Visualization and Usability Center Technical Report GIT-GVU-97-06, 1997
- Idris Hsi and Colin Potts <u>Towards Integrating Rationalistic and Ecological Design Methods</u> <u>for Interactive Systems</u>, Georgia Institute of Technology, Graphics, Visualization and Usability Center Technical Report GIT-GVU-95-27, 1995.
- Lara D. Catledge and Colin Potts, <u>Collaboration during Conceptual Design</u>, Georgia Institute of Technology, College of Computing Technical Report, GIT-CC-95-46, 1995.
- Potts, Colin, Jay D. Bolter and Albert Badre, <u>Collaborative Pre-Writing with a Video-Based</u> <u>Group Working Memory</u>, Georgia Institute of Technology, Graphics, Visualization and Usability Center Technical Report GIT-GVU-93-35, 1993.
- J. Kramer, K. Ng, C. Potts, A. Finkelstein, B. Khan, K. Whitehead, S. Chinnick, G. Brown and D. Galley, <u>TARA: Tool-Assisted Requirements Analysis</u>, RADC, also available as Imperial Coll., London, Dept. Computing Technical Report DoC 87/18, 1987.
- C. Potts, A.C.W. Finkelstein, M. Aslett and J. Booth, <u>Structured Common Sense: A</u> <u>Requirements Elicitation and Formalization Method for Modal Action Logic</u>, Alvey Initiative Project <u>Formal Specification Techniques for Real-Time Systems (FOREST)</u> Final Report R2: Elicitation and Formalization Method, UK Science and Engineering Research Council and UK Department of Trade and Industry, 1986.

# D. PRESENTATIONS

# Keynote and invited presentations

• Potts, C. *Student Engagement and Institutional Change*, (invited keynote) Association for Higher Education Teaching and Learning Conference on Student Engagement, Orem, UT. January, 2015.

- Potts, C. *What We Talk About When We Talk About E-Learning*, (invited keynote) Association for Higher Education Teaching and Learning Conference, Anchorage, AK. July, 2014.
- C. Potts. *What do Object Models Think About Life*? (invited paper) Presented at the Japanese Object-Oriented Symposium, Tokyo, Japan, August, 2001.
- C. Potts, *Requirements Models in Context*. (invited keynote) <u>Proc. 3rd International</u> <u>Symposium on Requirements Engineering (RE'97)</u>, Annapolis, MD, January 7-10, 1997. IEEE Computer Society Press, pp. 102-105.
- C. Potts, Invented Requirements and Imagined Customers: Requirements Engineering for Off-the-shelf Software (Invited workshop introduction paper), Proc. RE'95: Second International Symposium on Requirements Eng., York, UK March, 1995, IEEE Comp. Soc. Press, in press.
- C. Potts. *Requirements Models in Context*. Presented at the 3rd International Symposium on Requirements Engineering (RE'97), Annapolis, MD, January 7-10, 1997.
- C. Potts. *Software Engineering Research and Education in the Context of Real-World Projects*, presented at SBES-VI, 6th Annual Conf. Brazilian Software Eng. Soc., Gramado, Brazil, November, 1992.

# **Invited** seminars

- Potts, C. *Liberal Education and Curricular Complexity at Georgia Tech*, University System of Georgia Conference for LEAP Champions: The Emergence of LEAP State Georgia, Athens, GA. April 2016.
- Potts, C. *Georgia Tech's Commitment to Higher Ed Opportunity in STEM*, White House/FIU College Opportunity STEM Education Workshop, Florida International University, October 2014.
- Potts, C. Privacy Analysis for Non-Experts, Purdue University, March, 2006
- Potts, C. Human-Computer Cohabitation: The Affordances and Evolution of Taken-For-Granted Information Technology, Open University, UK May 2005
- Potts, C. *GA Tech Privacy Research Update*, Privacy Place Fall workshop, NC State Univ.., October 2004.
- Potts, C. Toward a Calculus of Sincerity:... and the many meanings of "misalignment", Privacy workshop, North Carolina State University, October 2002
- Potts, C. Normative Computing: Metaphors and the Implementation of Information Policies, Department Colloquium, Dept. Computer Science, Open University, UK, April, 2002.
- Potts, C. What is Privacy? Department Colloquium, Dept. Computer Science & Engineering, North Carolina State University, October 2001
- Potts, C., M. Moore, I. Hsi MesoMORPH, DARPA DASADA program meeting, Baltimore, June 2001.
- Potts, C. IT Features: Benefits, Burdens and "Bloat" Distinguished lecture, Knowledge Media Design Institute, Univ. Toronto, April 2001.
- C. Potts, "Coordination in Early Design: The Cases of Architecture and Software Engineering," Department of Computer Science and Information Systems, University of Jyväskylä, Finland. March, 1999.
- C. Potts, "Trends in Requirements Engineering," Tampere Univ. Technology, Dept. Information Technology, Tampere, Finland. March, 1999.
- C. Potts, "Trends in Requirements Engineering," Linkoping Univ., Dept. Computer and Information Science, Linkoping, Sweden, April 1998.
- C. Potts, "Trends in Requirements Engineering," Univ. Colorado at Colorado Springs, April 1998.

- C. Potts, Round Pegs into Round Holes: Designing Software that Works. Department Colloquium: Department of Computer Science, University of Oregon. February, 1997.
- C. Potts, Mission-Oriented Rationale Capture. DARPA Evolutionary Design of Complex Systems Program cluster meeting on Program Understanding and Rationale Capture. Marina del Rey, September, 1996.
- C. Potts. Abstraction and Context in Interactive Product Design. Intel, Portland, OR, June, 1996.
- C. Potts, Specification of Normal and Exceptional Behaviors, Department of Computer Science. University of Newcastle upon Tyne (UK). April, 1995.
- C. Potts, Specification of Normal and Exceptional Behaviors, Department of Computer Science. York University (UK). April, 1995.
- C. Potts, Using Schematic Scenarios to Understand User Needs, Department of Computing, Imperial College of Science, Technology and Medicine (London). March 1995.
- C. Potts, Specification of Normal and Exceptional Behaviors, Department of Computer Science. City University (London). March, 1995.
- C. Potts, Requirements Completeness, Enterprise Goals and Scenarios, Georgia State Univ., Computer Information Systems Department Colloquium, January 1995.
- C. Potts, Software Engineering Research: Industry as Our Laboratory, Motorola Visiting Faculty Program, November, 1994
- C. Potts, An Evaluation of Inquiry-Based Requirements Analysis for an Internet Service, NTT Software Laboratory, September, 1994
- C. Potts, An Evaluation of Inquiry-Based Requirements Analysis for an Internet Service, Computer Science Dept., Hiroshima University, September, 1994
- C. Potts, An Evaluation of Inquiry-Based Requirements Analysis for an Internet Service, Computer Science Dept., Advanced Telecommunications Research, Kyoto, September, 1994
- C. Potts, An Evaluation of Inquiry-Based Requirements Analysis for an Internet Service, Dept. Computer Science, Tokyo Institute of Technology, August, 1994.
- C. Potts, Innovation and Research in Software Engineering: Treating the Real World as Our Laboratory, Tokyo Software Managers' Association, August, 1994.
- C. Potts, Inquiry-Based Requirements Analysis, Matsushita Communications, August, 1994.
- C. Potts, Inquiry-Based Requirements Analysis, Matsushita/Panasonic Communications, Tokyo, August, 1994.
- C. Potts, Inquiry-Based Requirements Analysis, Mitsubishi Software Engineering Laboratory, Tokyo, August, 1994.
- C. Potts, Requirements Modeling for Evolving Systems, presented at Software Engineering Institute, Carnegie-Mellon Univ., May, 1992.
- C. Potts, Supporting Software Design, presented at Georgia Tech, College of Computing and Univ. California, Irvine, Dept. Comp. Sci., April, 1992.
- C. Potts, Object-Oriented Requirements Analysis and Design for Large, Evolving Systems, presented at Dept. Computing, Univ. Colorado and Department of Information and Software Systems Engineering, George Mason Univ., April, 1992.
- C. Potts, *Requirements Modeling for Evolving Systems: The Role of Object- Oriented Analysis*, presented at Dept. Computing, Imperial College of Science, Technology and Medicine, London, UK, October, 1991.
- C. Potts, *Strategies for Coping with Requirements Change*, presented at Siemens Research Lab., Princeton, NJ, September, 1991.
- C. Potts, *What Does it Mean to Support Decision Making?*, presented at Information Sciences Institute, Univ. Southern California and Mitsubishi Electronics Research Lab., Cambridge, MA, August, 1991.

- C. Potts, *Evolving System Requirements and the Role of Prototyping*, presented at Motorola Corp. Research and Development Center, Schaumberg, IL., July, 1991.
- C. Potts, *Issue-Based Design*, presented at Dept. Computer Science, Texas A&M Univ., April, 1991.
- C. Potts, *Getting Started with Prototyping*, presented at NCR Eng. and Manufacturing, San Diego, CA, Dec., 1990.
- C.Potts, *Representing Recurrent Issues and Decisions in Software Design Methods*, presented at Schlumberger Laboratory for Computer Science, Austin, TX, April, 1989.
- C. Potts, *Requirements Analysis, Domain Knowledge and Design*, presented at GTE Laboratories, Waltham, MA, March, 1989.
- C. Potts and G. Bruns, *Requirements by Analogy*, presented at Information Sciences Institute, Univ. Southern California, June, 1988.
- C. Potts and A. Finkelstein, *Eliciting and Formalizing Requirements for Real-Time Systems*, presented at Dept. Computer Science, Univ. York, UK, May, 1986.
- C. Potts, *Executing and Animating Requirements Models*, presented at Information Sciences Institute, Univ. Southern California, May, 1984.
- C. Potts, *Executable, Metric Models in Software Requirements and Design*, presented at Dept. Computer Science, Univ. Toronto, Dept. Computer Science, Univ. Colorado, RADC, Rome, NY, and GTE Laboratories, Waltham, MA, April, 1983.

# Georgia Tech seminars and talks

- Potts, C. *Privacy & Personal Policy Research @ Georgia Tech*, Privacy Place Spring workshop, GA Tech., March 2004.
- Potts, C. Internet Applications are from Mars; Policy Specifications are from Venus. Software Group, Brown Bag seminar, November 11, 2002.
- Potts, C. *Internet Privacy Alignment: Behavior vs. Expectations,* College of Computing BACKUP alumni conference, October 2002.
- Potts, C. A Bluffer's Guide to Deontic Logic, Information Security seminar, August 27, 2002.
- Potts, C. *How Communication Features Evolve: Fifty Years of Phone Fossils*, GVU Industrial Research Review Day, February 2002.
- Potts, C. *Internet Voting: Essential Requirements and Architecture*, GTRI Symposium on Internet Voting, November 2001
- Potts, C. What is Privacy? GCATT Privacy Workshop, October 2001.
- Potts, C. *Privacy by Design Principles of Privacy-Aware Ubiquitous Systems*, moderated discussion in Future Computing Group seminar, October 2001.
- C. Potts. "Metaphors We Surf By." Cognitive science Brown Bag seminar, February 2001.
- C. Potts. "Today the Noosphere, Tomorrow the World." Software Engineering Forum, February 2000.
- C. Potts. "Evolution of Telephony Features" Software Engineering Forum, October 1999.
- C. Potts. "If A Palm Pilot Could Speak, Would We Understand It?" Cognitive science Brown Bag seminar, October 1999.
- C. Potts. "What Programs Think about Life". GVU Brown Bag seminar, September 1999.
- C. Eastman, I. Hsi and C. Potts, "*Coordination in the Virtual Design Organization*", GVU Brown Bag seminar, February 1999.
- C. Potts, Feature evolution and variance, Software Engineering forum, January, 1999
- C. Potts, "Design for Usefulness", GVU NEC Day, 1997
- C. Potts, A. Anton, I. Hsi, L. Catledge, "*Deriving Designs from Goals*," GVU Industrial Affiliates, Research Review Day presentation, February 1996

- L. Catledge and C. Potts, *Studying Creative Design in the Field*, Edutech Lunch and Learn Seminar, March 1995.
- C. Potts, *Models for Industry-Based Research and Industrial Collaboration*, Georgia Tech., College of Computing, Friday Faculty Forum, February 1995
- C. Potts, *Educating and Supporting Reflective Design of Interactive Systems*, Edutech Lunch and Learn Seminar, January 1995.
- C.Potts, *External Memories for Team Projects: Pre-writing and video*, Georgia Tech, GVU Brown Bag, February, 1994.
- C.Potts, *Computer-supported Cooperative Work: Types and Outcomes*, Georgia Tech., College of Computing, Informal CSCW Seminar, January, 1994.
- C. Potts, *Developing Initial OOA Models*, presented at Georgia Tech., College of Computing, Informal Software Engineering Colloquium, April, 1993.
- C. Potts, *The Dexter Reference Model*, presented at Georgia Tech., College of Computing, Programming Methods Seminar, February, 1993.
- C. Potts, *Introduction to Z*, presented at Georgia Tech., College of Computing, Programming Methods Seminar, January, 1993.
- C. Potts, M. Lubars, C. Richter, *Active Versus Passive Objects*, presented at Georgia Tech., College of Computing, Programming Methods Seminar, November, 1992.

# E. GRANTS AND CONTRACTS

# As Principal Investigator

- The Role of Service Learning and Community Engagement on the Ethical Development of STEM Students and Campus Culture. \$699,030 60 months, 2016-2021, National Science Foundation, CCE Institutional Transformation Grant (with Ellen Zegura, Jason Borenstein, Wendy Newstetter)
- *Policy Modularity: Toward a Science of Socially-Embedded System Design* \$75,000 24 months, 2004-2005, National Science Foundation, Special Grant for Exploratory Research.
- *Systematic Design of Intranet Services* (PI. Potts), \$32,000. 12 months. 1997, Nippon Telephone and Telegraph.
- *Mercury Observer Project (renewal)* (PI: Potts & Abowd), \$99,869. 12 months, 1996, Motorola.
- *Improving Requirements Completeness through Inquiry-Based Goal Refinement* (PI: Potts), \$49,966. 24 months, 1996-1997. NSF CISE.
- Mercury Observer Project (renewal) (PI: Potts), \$56,519. 12 months, 1996, Motorola.
- *Goal-Based Design of Web-Based Applications* (Principal Investigator: Potts). \$32,783, 12 months: 1995. Nippon Telephone and Telegraph.
- *Design and Analysis of Consumer Software* (PI: Potts), \$5,000, 12 months, 1995-96, E-Systems Fellowship.
- *Inquiry-Based Requirements Analysis* (Principal Investigator: Potts). \$32,000, 12 months: 1995. Nippon Telephone and Telegraph.
- *The Mercury Observer Project* (Principal Investigator: Potts). \$49.961, 12 months: 1994-95. Motorola Cellular Infrastructure Company.
- Institutional Memory for Multidisciplinary Software Design Education (Principal Investigators: Dr. R. Billington, Dr. T. Chandler, Prof. J. Kolodner, Potts) \$29,678, 12 months: 1993-94. Georgia Inst. Technology, Educational Technology Initiative.
- *Computer-Supported Collaborative Writing*, (Principal Investigators: Potts, Prof. A. Badre and Prof. J.D. Bolter). \$30,000, 12 months: 1993-1994. NCR Corporation.

• *Requirements Modeling for Evolving Systems*, (Contractor: Microelectronics and Computer Technology Corporation; Principal Investigator: Potts). \$540,000, 12 months: 1991-1992. AT&T/NCR, Bellcore, Hughes Aircraft, Lockheed, The MITRE Corporation, Motorola, NASA (Johnson Space Center), Rockwell International, Texas Instruments.

# As Co-Principal Investigator

- Encoding Rights, Permissions and Obligations: Privacy Policy Specification and Compliance \$920,000 (Co-PIs: C. Potts and A. Anton), 48 months. August 2003 July 2007. NSF Information Technology Research Program
- *Aligning Societal Values, Privacy Policy, and IT Requirements* (Co-PIs: C. Potts and A. Anton) \$474,030. 24 months. 2001-2003. NSF ITR/PE
- Meso-Adaptation of Systems (PI: Moore; Co-PI. Potts), \$379,126. 24 months. DARPA
- *MORALE: Mission-Oriented Requirements Evolution*. (Co-PIs: Abowd, McCracken, Potts, Rugaber) \$604,000. 5 years, 1996-2000. ARPA.
- *Tool-Assisted Requirements Analysis*, (Contractor: Imperial College of Science and Technology, London; Co-principal investigators: Dr. C. Potts and Dr. J. Kramer) \$609,729, 24 months: 1985-1987. RADC (now, Rome Lab).

#### As Senior Personnel or Contributor

- *Georgia Tech Public Service Pathway*, Atlanta Commerce Club Foundation, \$200,000, August 2015-July 2017
- Formal Specification Techniques for Real-Time Systems (FOREST). \$1,250,000 (approx.). 36 months: 1985-87. UK Department of Industry and Science & Engineering Research Council. Contractors: Imperial College of Science and Technology, London, GEC/Marconi Research Center, GEC Avionics, UK Atomic Energy Research Establishment. Imperial College Principal Investigators: Prof. T.S.E. Maibaum, Prof. S.J. Goldsack, Mr. R.J. Cunningham. Funding Agency: Alvey Directorate of the UK Science and Engineering Research Council and Department of Trade and Industry. 1985-1987.
- Panel on Information Technology Evaluation: People and Computers. \$150,000 (approx.) 36 months: 1985-87. UK Social Science and Economics Research Council. Principal Investigator: Dr. C. Clegg, UK Medical Research Council, Social and Applied Psychology Unit, Sheffield Univ.
- *Executable Metric Model Applications*. \$750,000 (approx.) 24 months: 1983-84. Air Force (RADC). Contractor: Imperial College of Science and Technology, London; Principal investigator: Prof. M.M. Lehman 1983-4. RADC.

#### F. OTHER PROFESSIONAL ACTIVITIES

- 1998 Schlumberger Laboratory for Computer Science (Software process evaluation)
- 1997 Software Productivity Solutions (Scenario Generation for Requirements Analysis).
- 1996 GTE Laboratories (Scenario Analysis and Business Rules).
- 1995 Orkand (Computer-supported cooperative work).
- 1994 NTT Software Laboratory (Requirements analysis methods).
- 1986 ITT (Knowledge representation for computer-aided learning)
- 1985-1986 GEC Marconi Research Center (Formal specification and requirements analysis techniques for real-time systems)

# V. TEACHING

# A. COURSES TAUGHT (LAST TEN YEARS)

Semester, Year	Course Number	Course Title	Number of Students
Spring, 2020	PHIL 3127 (Honors)	Science, Technology and Human Values: Thinking and Reasoning	Estd. 20
Summer, 2018	GT 1000 (iGniTe)	Freshman Seminar	15
Fall, 2016	CS 1315 (Honors)	Introduction to Media Computing	20
Fall, 2015	GT 1000 (Leadership Program)	Freshman Seminar	15
Spring, 2015	CS 1315 (Honors)	Introduction to Media Computing	15
Summer, 2013	CS 1315 (Oxford)	Introduction to Media Computing	14
Fall, 2012	CS/PUBP 2803 (co-taught with	Special Topics: Designing a	9
	colleagues from Public Policy and Aerospace Eng.	Flexible Major	
Summer, 2012	CS/PSYC 3750 (Barcelona)	Introduction to Cognitive Science	28
,	CS 4475 (Barcelona)	Computational photography	30
Spring, 2012	CS 6455	User Interface Evaluation	38
1 0,	CETL 8000	<b>Teaching Assistant Preparation</b>	28
Fall, 2011	CS 1315	Introduction to Media Computing	126
	CS 4001	Computing and Society	38
Summer, 2011	CS 1315 (Oxford)	Introduction to Media Computing	17
	CS 4001 (Oxford)	Computing and Society	10
Spring, 2011	CS 1315	Introduction to Media Computing	145
	CS 6455	User Interface Evaluation	30
Fall, 2010	CS 1315	Introduction to Media Computing	141
	CS 4001 (Honors)	Computing and Society	15
Summer, 2010	CS 1315 (Oxford)	Introduction to Media Computing	13
	CS 4001 (Oxford)	Computing and Society	c. 15
Fall, 2009	CS 4001	Computing and Society	42
	CS 6451	Introduction to Human-Centered Computing	c. 8
Summer 2009	CS 4001(Oxford)	Computing & Society	c. 10
Summer 2009	CS 1315 (Oxford)	Introduction to Media Computing	c. 12
Spring 2009	CS 4001	Computing & Society	35
Spring 2009	CS 1316	Representing Structure and Behavior	160

# B. INDIVIDUAL STUDENT GUIDANCE Doctoral Students

Name	Date of Graduation	Title of Thesis	Current Position
Carlos Jensen	2005	Designing for Privacy in Interactive Systems	Professor and Associate Dean, Oregon State University
Idris Hsi	2005	Characterizing the Conceptual Coherence of Computing Applications Using Ontological Excavation	Product Manager, R.R. Donnelley.
Ana I. Antón	1997 (co- advisor, Peter Freeman)	Goal Identification and Refinement in the Specification of Software- Based Information Systems	Professor, Interactive Computing, Georgia Tech.

#### Service on graduate thesis or dissertation committees

- 2014 Klara Benda (Human-Centered Computing)
- 2009 Jeremy Goecks (Ph.D. Computer Science)
- 2009 Ed Clarkson (Ph.D. Computer Science)
- 2005 James Hudson (Ph.D. Computer Science)
- 2005 Jason Elliott (Ph.D. Computer Science)
- 2005 Heather Richter (Ph.D. Computer Science).
- 2004 Robert Waters (Ph.D. Computer Science)
- 2001 Colleen Kehoe (Ph.D. Computer Science)
- 2001 William Murdock (Ph.D. Computer Science)
- 2000 Caren Paul (M.S. Design Media)
- 1999 Tommi Mikkonen (Dr. Tech. Software Engineering, Tampere Univ. Technol., Finland)
- 1999 Ben Hall (M.S. Design Media)
- 1998 Joachim Karlsson (Public Opponent, Ph.D. Computer & Information Science, Linköping Univ., Sweden)
- 1997 Michael Pinkerton (M.S. Computer Science)
- 1997 Marcia Crosland (Ph.D. Psychology)
- 1997 James Knutson (Ph.D. Psychology)
- 1997 Jean-Marc Debaud (Ph.D. Computer Science)
- 1996 Hernan Astudillo (Ph.D. Computer Science)
- 1995 Keith Edwards (Ph.D. Computer Science)
- 1994 Lara Catledge (M.S. Interaction Design & Technology)

#### Mentorship of postdoctoral fellows or visiting scholars

- Massimo Cossetino, ICAR, Palermo, Italy
- Kenji Takahashi, NTT Media Laboratories, Musashino, Japan

# C. OTHER TEACHING ACTIVITIES

# **Continuing Education**

- Introduction to Software Engineering (renamed Fundamentals of Software Engineering), Jan., 1993, Apr., 1993, Oct., 1993, Feb., 1995, (public courses), Dec., 1993 and July, 1995 (USAF contract courses), and July, 1995 (commercial contract course). Revised course as Improving Software Quality and taught September, 1996, October, 1997, October, 1998, January, 1999 (public course).
- Prepared and taught new course Understanding Customer Requirements (April, 1996) and taught to US Army (Sept. 1996), National Data Corp. (Sept. and Nov. 1996) and Worldspan Corp. (Dec., 1998 and Feb., 1999 as "Methods for Understanding User Needs").
- Prepared and taught new course Software Requirements and Specification (1998) and taught public courses October, 1998, March, 1999, March and November 2000.
- Taught Object-Oriented Analysis and Design course, Summer, 2000.
- Participated in design of Human-Computer Interaction Certificate program (1997).

# **Curricular Design**

- Member of Collge of Computing committee to formulate Ph.D. program in *Human-Centered Computing*.
- With Prof. E. Mynatt, designed CS/PSYC6750 *Human-Computer Interaction*, including team-based project and design studio.
- Designed and was first to teach CS 6320 Requirements Analysis.
- Designed and was first to teach CS6300 *Software Engineering Process*, including individual or pair research project.
- Designed and was first to teach CS 3300 *Intro. Software Engineering*, including hierarchical team projects.
- Designed and was first to teach CS 4320 *Software Engineering Process*, including teambased research or process assessment project.
- Led the development of semester-length CS 4000 (*Computing and Society*) and its conversion to CS 4001 (CS 4000, incorporating argumentative reasoning and communication.)
- Designed a doctoral seminar *Technology and Society* (1998) that subsequently evolved into the CS 6451 *Human-Centered Computing (I)* seminar for the HCC Ph.D. program.
- For Imperial College, London developed and taught undergraduate courses in software design and human factors and user interface design and masters-level courses in software engineering and project management.

# **Instructional Materials Developed**

• Introduced studio component into CS 3302 *Software Engineering* (now CS 3300) and CS/PSYC 4753 *Human Factors in Software Development* (now CS/PSYC 3750.)

# Participation in Interdisciplinary Teaching Activities

- Taught CS/ISYE/PST/PSYC 3790 Introduction to cognitive science, an inherently interdisciplinary course
- Taught CS 3750 *User Interface Design* and its predecessors CS 4750 and 4753, all of which have been cross-listed as psychology, industrial engineering and/or public policy classes, frequently with studio-trained architecture and industrial design students.
- Co-taught CS/PSYC 4750 *User Interface Design* (now CS/PSYC 3750) with Prof. Khan (Architecture) in Barcelona.

- Designed and co-taught CS/ISYE/PST/PSYC 8795 Cognitive Science Seminar with Drs. Nersessian (Computing & Public Policy), Goel (Computing), Herzog (Psychology), Kirlik (Industrial and Systems Engineering) and Knoespel (Literature, Communication and Culture).
- Designed and co-taught a doctoral seminar, *Naturalistic Inquiry and Design* with Dr. Newstetter that subsequently developed into CS 6455 *User Interface Evaluation*.

#### VI. SERVICE

#### A. PROFESSIONAL CONTRIBUTIONS

# Conference program committee chairing and memberships

- 2008 Reviewer, CHI: Computer-Human Interaction, Boston, MA, April 2009.
- 2007 Program Committee member, RE'07: International Conference on Requirements Engineering. Dehli, October 2007
- 2005-2006 Program Committee member, SOUPS'06: Symposium on Usable Privacy and Security, Pittsburgh, July 2006
- 2005-2006 Program Committee member, DIS'06: International Conference on Designing Interactive Systems, Pennsylvania State University, June, 2006.
- 2003-2004 Program Committee member, RE'04: International Conference on Requirements Engineering. Tokyo, September 2003.
- 2002-2003 Program Committee member, RE'03: International Conference on Requirements Engineering. Monterey, CA, September 2003.
- 2002 Program Committee member, SREIS'02: Workshop on Software Requirements for Information Security. Raleigh NC, October 2002.
- 2001-2002 Program Committee member, RE'02: International Conference on Requirements Engineering. Essen, Germany, September 2002.
- 2001 Program Committee member, WESS: Workshop on Empirical Studies of Software Maintenance, Florence, November 2001.
- 2000-2001 Program Committee member, RE'01: Fifth International Symposium on Requirements Engineering. Toronto, Canada, September 2001.
- 2000-2001 Program Committee member, SREIS'01: Workshop on Software Requirements for Information Security. Indianapolis IN, March 2001.
- 1995-2001 Member Executive Committee, IFIP Working Group 2.9 (Requirements Engineering)
- 1997-1999 Program Committee member, RE'99: Fourth International Symposium on Requirements Engineering. Limerick, Ireland, June 1999.
- 1995-1996 Co-organizer (with K. Takahashi, NTT Software Laboratories) Workshop on Requirements Engineering in and for Networked Enterprises, WETICE'96 (Workshops on Enabling Technologies in Collaborative Enterprises), Stanford University, June 1996.
- 1995-1996 Member, Program Committee, ICRE'96: Second International Conference on Requirements Engineering, Colorado Springs, CO, 1996.
- 1994-1995 Member, Program Committee, IFIP Working Group 8.1 (Information Systems Design) Working Conference on Information Systems Development for Decentralized Organizations, Trondheim, Norway, 1995.
- 1993-1095 Member, Program Committee, 17th International Conference on Software Engineering, Seattle, WA, 1995.
- 1993-1995 Member, Program Committee, RE'95: Second International Symposium on Requirements Engineering, York, UK, 1995.

- 1993-1994 Member, Program Committee, ICSE Workshop on Software Engineering Education, Sorrento, Italy, 1994.
- 1993-1994 Coordinator, CHI'94 Workshop: Using Scenarios to Elicit User Requirements, CHI'94, Boston, 1994.
- 1993-1994 Member, Program Committee ICRE'94: International Conference on Requirements Engineering, Colorado Springs, CO, 1994.
- 1992-1993 Member, Program Committee, Seventh International Workshop on Software Specification and Design, Redondo Beach, CA, 1993.
- 1992-1993 Member, Program Committee, IFIP Working Group 8.1 (Information Systems Design) Working Conference on Information System Development Process, Como, Italy.
- 1992-1993 Member, Program Committee, RE'93: First International Symposium on Requirements Engineering, San Diego, CA.
- 1991-1993 Chair, Steering Committee, International Workshop on Software Specification and Design
- 1992, Member, Program Committee ECHT'92: European Conference on Hypertext, Milan, Italy.
- 1991-1992 Member, Planning Committee for Univ. Texas at Austin Institute on Software Development
- 1991 Member, Program Committee, Sixth International Workshop on Software Specification and Design, Como, Italy.
- 1991 Member, Program Committee, Third European Software Engineering Conference, Milan, Italy.
- 1987-1989, Program Chair, Fifth International Workshop on Software Specification and Design, Pittsburgh, PA.
- 1984-1985, Member, Program Committee, and Local Arrangements Coordinator, Third International Workshop on Software Specification and Design, London, UK.
- 1982-1983, Member, Organizing Committee, and Local Arrangements Coordinator, Software Process Workshop, Egham, UK.

# Editorial work and reviewing

- 2004-2007 Reviews for International Journal of Human-Computer Studies
- 2000-2010 member, Editorial Board Requirements Engineering, Springer-Verlag journal.
- 1992-2010 Member, Editorial Board, Automated Software Engineering (Klouwer Academic Publishers).
- 1987-2007 Reviews for IEEE Transactions on Software Engineering
- 2005 Reviews for *Multimedia Systems*
- 2003-2005 Reviews for ACM Transactions on Computer-Human Interaction (TOCHI)
- 1996 Reviews for Journal of Organizational Computing
- 1992-2004 Reviews for ACM Transactions on Software Engineering Methods and Environments.
- 1987-2004 Reviews for *IEEE Software*
- 1995-2000 Co-editor in chief (with Prof. P. Loucopoulos, UMIST). *Requirements Engineering*, Springer-Verlag journal.
- 1996 Reviewer for *Human-Computer Interaction*

# Programmatic assessment

- 2019 Academic Program Review for Chapman University, College of Engineering.
- 2014 Observer for Southern Association of Colleges and Schools Commission on Colleges onsite accreditation reaffirmation visit, Louisiana State Univ.

- 2001-2009 National Science Foundation reviews (numerous programs)
- 2004 Engineering and Physical Sciences Research Council (United Kingdom)
- 2003 Research Council of Norway
- 1997 Colorado Institute of Technology program review

#### B. PUBLIC AND COMMUNITY SERVICE

- 2019-2022 President, Reinvention Collaborative
- 2015-2022 Member, Executive Board, Reinvention Collaborative (formerly Reinvention Center)
- 2014-present Peer Evaluator, The Commission on Colleges of the Southern Association of Colleges and Schools
- 2014-present Member, Executive Advisory Board, Higher Education Teaching and Learning Association.
- 2012-present Member, Reinvention Center, Undergraduate Vice Provosts Network
- 1998-2001 Member, Board of Directors, Atlanta Photography Group

#### C. INSTITUTE CONTRIBUTIONS

# Institute committee involvement and leadership

- 2020 Co-Chair, Restarting Academic Affairs Activities Task Force
- 2020 Member, Georgia Tech COVID-19 Planning Health and Safety Subcommittee
- 2020 Member, Georgia Tech COVID-19 Planning Task Force
- 2019-2020 Member, Strategic Planning Steering Committee; Member, Vision Subcommittee.
- 2017-2019 Path Forward Together Action Group, Executive Sponsor for Academics Cluster.
- 2016-present Co-chair (with Julia Kubanek and Linda Daniels), Academic Space Planning Working Group
- 2016-2018 Member, Executive Committee, Commission on the Next in Education (executive sponsor of Future Learning Needs Discovery Group; leader of sections on Advising for a New Era and Whole-Person Education)
- 2014-present Chair, Athletics Academic Steering Committee
- 2013-present Member, Georgia Tech Athletics Association Board of Trustees Subcommittee on Academic Affairs
- 2013-2018 Member, Georgia Tech Arts Council
- 2016-2018 Secretary, Georgia Tech Athletics Association Board of Trustees
- 2013-2018 Member, Georgia Tech Athletics Association Board of Trustees
- 2012-present Vice Provost for Undergraduate Education
- 2012-present Georgia Tech representative, University System of Georgia, General Education Council
- 2012-present Member, Institute president's cabinet
- 2012-present Georgia Tech representative, Atlantic Coast Conference Academic Committee
- 2012-present Member (ex-officio), Institute Undergraduate Curriculum Committee
- 2012-present Member (ex-officio), Faculty Executive Committee
- 2012-present Member (ex-officio), Institute Undergraduate Curriculum Committee, Subcommittee on General Education
- 2008-2011 Co-chair, Strategic planning task-force on "X-Degree" (Individualized Major)
- 2007 Member, GT1000 Summer Book Program Planning committee
- 2001-2004 College of Computing representative, Campus Library committee.

- 2002 College of Computing faculty representative, Academic Misconduct Awareness Seminar Program.
- 1999-2000 Associate director (Seminars), Cognitive Science Program.

#### College committee involvement and leadership

- 2011-2012 Member, Computational Media Program Curriculum Committee
- 2004-2011 People thread representative and "shepherd", Undergraduate Curriculum Committee.
- 2008-2011 School of Interactive Computing representative, Masters Program Reinvention Committee
- 2002 Member of Dean's task force on External Perceptions of College of Computing
- 1995-1999. Member faculty organizing committee for SERBIS Round Table.
- 1997 Member of Graphics, Visualization and Usability Center committees to propose (successfully) a Masters degree in Human-Computer Interaction, and to oversee the interdisciplinary administration of the degree courses.
- 1994-1996 Associate Director (Industrial Affiliates Program), Graphics, Visualization and Usability Center
- 1995-96 Member, GVU committee for Interdisciplinary Human-Computer Interaction Masters Program.
- 1993-1994 Member, Edutech Working Groups on Design Education and Case-Based Teaching.

#### School committee involvement and leadership

• 2010-2012 Member at Large, School Chair Advisory Committee

# Student society advising and coordination

- 2006-2011 and 2015-present Faculty Advisor: GA Tech Chess Club
- 2002-2004, and 2008-2011 Faculty Advisor: GA Tech Photography Club
- 2004-2005 College of Computing representative on Student Activities committee.