May 31–June 2, 2012 Milwaukee, Wisconsin, USA



Advancing Computing as a Science & Profession



SIGMIS-CPR'12

Proceedings of the 2012

Computers and People Research Conference

Sponsored by:

ACM SIGMIS

Supported by:

Marquette University, SIM, University of Wisconsin-Parkside, and University of Wisconsin-Whitewater



The Association for Computing Machinery 2 Penn Plaza, Suite 701 New York, New York 10121-0701

Copyright © 2012 by the Association for Computing Machinery, Inc. (ACM). Permission to make digital or hard copies of portions of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyright for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permission to republish from: permissions@acm.org or Fax +1 (212) 869-0481.

For other copying of articles that carry a code at the bottom of the first or last page, copying is permitted provided that the per-copy fee indicated in the code is paid through www.copyright.com.

Notice to Past Authors of ACM-Published Articles

ACM intends to create a complete electronic archive of all articles and/or other material previously published by ACM. If you have written a work that has been previously published by ACM in any journal or conference proceedings prior to 1978, or any SIG Newsletter at any time, and you do NOT want this work to appear in the ACM Digital Library, please inform permissions@acm.org, stating the title of the work, the author(s), and where and when published.

ISBN: 978-1-4503-1110-6

Additional copies may be ordered prepaid from:

ACM Order Department

PO Box 30777 New York, NY 10087-0777, USA

Phone: 1-800-342-6626 (USA and Canada)

+1-212-626-0500 (Global) Fax: +1-212-944-1318 E-mail: acmhelp@acm.org

Hours of Operation: 8:30 am - 4:30 pm ET

ACM Order Number: 433120

Printed in the USA

Foreword

It is our great pleasure to welcome you to the 50th Annual Computers and People Research Conference - *ACM SIGMIS CPR 2012*. For the past 50 years, ACM SIGMIS CPR has engaged the academic and practitioner communities in understanding issues pertaining to supply of information technology (IT) professionals, demand for their skills and talents, and their readiness for the workplace.

Many issues have evolved and matured with changes in technology, organizational valuation of IT, globalization, and economic downturns and upswings. During the past 50 years of CPR, several generations of IT professionals have undergone this cycle of preparation, recruitment, and retention. As baby boomers retire, a new generation of IT professionals presents yet another set of opportunities and challenges for continued research. These transitions beg the questions: what have we learned in the past 50 years and what do we envision as emerging issues for the next 50?

On this 50th anniversary, the SIGMIS CPR proceedings reflect upon these contributions to theory and research and identify new and emergent issues. The papers, panels, and posters within the proceedings address themes such as diversity and cultural issues in the attraction and retention of IT professionals, occupational commitment, curriculum issues and trends, and traditional CPR topics such as IT career development practices and the skills and abilities essential for the next decade. We hope these proceedings serve as a valuable reference for computer and people researchers and practitioners in the coming years.

Putting together ACM SIGMIS CPR 2012 was made possible by the work of many dedicated individuals. We first thank the authors for providing the content of the program, which continues to showcase exemplar work in the field. We are grateful to the program committee who worked diligently in reviewing papers and providing constructive feedback for authors. In addition, we would like to thank Andreas Eckhardt and Mike Gallivan for organizing this year's doctoral consortium, which provides a glimpse of the exciting globally diverse research on the horizon. We also thank Indira Guzman de Galvez for her role as Treasurer, and Nita Brooks for publicity. Special thanks go to Lisa Tolles and her team from Sheridan Proceedings Service for their work in processing the proceedings in a timely manner. We would also like to thank the Milwaukee Visitors Bureau and DCD for the photograph included on the front cover of the proceedings. We are also grateful to the Society of Information Management (SIM), Wisconsin, whose partnership has been critical for launching a synergistic engagement with the practitioner community. Finally, we thank our sponsor, ACM SIGMIS, the leadership of Janice Sipior, and our generous supporters.

We hope that you will find this program interesting and thought-provoking and that the conference will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world.

Monica Adya

Marquette University Conference Co-Chair

Haiyan Huang

Michigan Technological University Program Co-Chair

Kate M. Kaiser

Marquette University
Local Arrangements Co-Chair

Robert Horton

University of Wisconsin-Whitewater Conference Co-Chair

Jeria Quesenberry

Carnegie Mellon University Program Co-Chair

Stephen Hawk

University of Wisconsin-Parkside Local Arrangements Co-Chair

Table of Contents

SIGMIS-CPR 2012 Conference Organizationvii		
S	IGMIS-CPR 2012 Sponsor & Supporters	X
С	IO Panel	
•	Chief Information Officer (CIO) Panel: How to Groom IT Leadership as Change Agents Colin Boyd (Johnson Controls), Denis Edwards (Manpower Group), Philip Loftus (Aurora Health Care), Timothy G. Schaefer (Northwestern Mutual)	1
S	ession 1.1: Panel Session–I	
•	How CPR is Like Madonna: 50 Years of Reinvention – A Discussion Reflecting on the Past, Present, and Future. Monica Adya (Marquette University), Catherine Beise (Salisbury University), Bob Bostrom (University of Georgia), Paul Licker (Oakland University), Lorne Olfman (Claremont Graduate University), Maung K. Sein (University of Agder)	3
	ession 1.2: Perceptions about IT Careers ssion Chair: Jo Ellen Moore (Southern Illinois University Edwardsville)	
•	Legacy Job Titles in IT: The Search for Clarity Patrick Donohue, Norah Power (University of Limerick)	5
•	Are We in the Right Profession? – Comparing Information Systems, Computer Science and Other Disciplines' Professional's Perceptions of the Job Market	11
	ession 2.1: IT Management ssion Chair: Catherine Beise (Salisbury University)	
•	Information Technology Security Task-Technology Fit Based on the Technology-to-Performance Chain Theory	17
•	The Role of Informal Control in PMO Lite Environments Jo Ellen Moore, Clay K. Williams, Mary Sumner (Southern Illinois University Edwardsville)	27
•	Research-in-Progress: Reframing a Knowledge Level Framework	31
	ession 2.2: IT Skills and Education ssion Chair: Sven Laumer (University Bamberg)	
•	Skills in the Management Oriented IS and Enterprise System Job Markets Chuck Litecky, Amy J. Igou (Southern Illinois University, Carbondale), Andrew Aken (Northeastern State University– Broken Arrow)	35
•	Developing a Survey to Identify IT Consultant Skills for Incorporating in the IS Curriculum Diane Lending, Thomas W. Dillon (James Madison University)	45

Session 3.1: IT Workforce Management-I Session Chair: Cynthia Riemenschneider (Baylor University) What Should I Understand? The Concept of Shift of Understanding. Gaëtan Mourmant (Université de Strasbourg), Katerina Voutsina (National Technical University of Athens) Once You Click 'Done': Investigating the Relationship between Disengagement, Valerie F. Ford, Diana L. Burley (The George Washington University) Session 3.2: IT Workforce Management-II Session Chair: Eileen Trauth (The Pennsylvania State University) Damien Joseph, Christine Koh (Nanyang Technological University) Too Much of and Less Than a Good Thing: Implications for Managing IT Professionals..73 Thomas W. Ferratt, Harvey Enns, Jayesh Prasad (University of Dayton) Train and Retain-The Impact of Mentoring on the Retention of FLOSS Developers79 Andreas Schilling, Sven Laumer, Tim Weitzel (University of Bamberg) Session 4.1: Research Poster Session and Doctoral Consortium **Poster Session** Evaluation of E-Technology Acceptance: An Empirical Analysis85 Rahmath Safeena, Abdullah Kammani (Taif University) Sureerat Saetang, Abrar Haider (University of South Australia) • Experiences in Service-Learning Pedagogy: Lessons for Recruitment and Retention of Under Represented Groups 89 Jeria Quesenberry, Randy Weinberg, Larry Heimann (Carnegie Mellon University) Leveraging the Crowd as a Source of Innovation: Does Crowdsourcing Represent a New Model for Product and Service Innovation?.....91 Lee B. Erickson (The Pennsylvania State University) Underrepresented Groups in Gender and STEM: The Case of Black Males in CISE97 Curtis C. Cain (The Pennsylvania State University) Links to the Source – A Multidimensional View of Social Ties for the Retention Andreas Schilling (University of Bamberg) How Employee Turnover Impacts Social Capital and Performance of Companies.............109 Olav Spiegel (University of Cologne) Session 5.1: Panel Session-II Conrad Shayo (California State University), Eileen M. Trauth (The Pennsylvania State University), Kate Kaiser (Marquette University), Frank Lin (California State University)

vi

Mobile Recruiting: Insights from a Survey among German HR Managers......117

Session 5.2: IT, Computers and People–I Session Chair: Lee Erickson (The Pennsylvania State University)

Stephan Böhm (RheinMain University of Applied Sciences),

Susanne J. Niklas (RheinMain University of Applied Sciences & Saarland University)

•	The Impact of Leadership on Participation and Trust in Virtual Teams Kimberly Furumo, Emmeline de Pillis (University of Hawaii at Hilo), Mark Buxton (University of Illinois, Springfield)	123
•	A Mixed Bag: How Work and Retirement Influence Older Adults' ICT Use	127
	ession 6.1: Global and Cultural Aspects of the IT Workforce ssion Chair: Gaetan Mourmant (University of Strasbourg)	
•	Examining the Influence of Cultural Values on the Post-Adoptive Use of Knowledge Management Systems	131
	Stefan Tams (HEC Montréal), Jason Thatcher (Clemson University), Mark Srite (University of Wisconsin-Milwaukee)	131
•	Research in Progress: Fun versus Productivity and Intentions to Use ICT's in Bolivia Indira R. Guzman (Trident University International), Michelle L. Kaarst-Brown (Syracuse University)	137
•	Exploring the Role of Mentoring in the IS Profession: A Cross-National Comparison Monica Adya, John Cotton (Marquette University)	143
	ession 6.2: IT, Computers and People–II ssion Chair: Deborah J. Armstrong (Florida State University)	
•	Measuring Alignment within Relationships among Socio-Technical System Components: A Study of Wiki Technology Use Andrea Hester (Southern Illinois University Edwardsville)	147
•	Organizational Uses of the Crowd: Developing a Framework for the Study of Crowdsourcing Lee B. Erickson, Irene Petrick, Eileen M. Trauth (The Pennsylvania State University)	155
•	Creativity in Dyads: The Role of Closeness and Media Multiplexity	159
	ession 7.1: IT Workforce Diversity ssion Chair: Damien Joseph (Nanyang Technological University)	
•	Schema Accuracy and Career Challenges for Men in the Information	1.67
	Technology Workplace Deborah J. Armstrong (Florida State University), Cynthia K. Riemenschneider (Baylor University), Margaret F. Reid (University of Arkansas)	103
•	Analyzing Citation Impact of IS Research by Women and Men: Do Women Have Higher Levels of Research Impact? Mike Gallivan (Georgia State University)	er 175
•	Exploring Gender and Job Embeddedness in Information Technology Professionals Sherry D. Ryan, Gina Harden (University of North Texas)	185
	ession 7.2: History and Future of the IT Workforce ssion Chair: Conrad Shayo (California State University, San Bernardino)	
•	Observations Regarding the History of the Study of Computer Personnel	189
•	Embracing Intersectionality in Gender and IT Career Choice Research	
Δ	uthor Index	213

SIGMIS CPR 2012 Conference Organization

General Chairs: Monica Adya (Marquette University, USA)

Robert Horton (University of Wisconsin-Whitewater, USA)

Program Chairs: Haiyan Huang (Michigan Technological University, USA)

Jeria Quesenberry (Carnegie Mellon University, USA)

Conference Treasurer: Indira Guzman de Galvez (*Trident University International, USA*)

Doctoral Consortium Chairs: Andreas Eckhardt (Goethe University Frankfurt, Germany)

Michael Gallivan (Georgia State University, USA)

Doctoral Consortium Mentors: Jo Ellen Moore (Southern Illinois University Edwardsville, USA)

Gaetan Mourmant (*University of Strasbourg, France*)

Fred Niederman (Saint Louis University, USA)
Greta Polites (Bucknell University, USA)
Tim Weitzel (Bamberg University, Germany)

Local Arrangements Chairs: Kate M. Kaiser (*Marquette University, USA*)

Stephen Hawk (University of Wisconsin-Parkside, USA)

Publicity Chair: Nita Brooks (*Middle Tennessee State University, USA*)

Program Committee: Monica Adya (*Marquette University, USA*)

Oluwole Akinyokun (Federal University of Technology, Akure)

Deb Armstrong (Florida State University, USA)

Sarah Beecham (The Irish Software Engineering Research Centre, Ireland)

Catherine Beise (Salisbury University, USA) Johanna Birkland (Syracuse University, USA)

Nita Brooks (*Middle Tennessee State University, USA*) Stephan Böhm (*Hochschule RheinMain, Germany*) Diana Burley (*The George Washington University, USA*)

Orin Day (*RTI, USA*)

Thomas Dillon (*James Madison University, USA*)
Patrick Donohue (*University of Limerick, Ireland*)

Andreas Eckhardt (Goethe University Frankfurt, Germany)

Randy Eckhoff (RTI, USA)

Harvey Enns (*University of Dayton, USA*)

Lee Erickson (The Pennsylvania State University, USA)

Barbara Felts (*RTI*, *USA*)

Thomas Ferratt (University of Dayton, USA)

Valerie Ford (*The George Washington University, USA*) Kimberly Furumo (*University of Hawaii at Hilo, USA*) Indira Guzman de Galvez (*TUI University, California, USA*) **Program Committee** Tracy Hall (*Brunel University, United Kingdom*)

(continued): Andrea Hester (Southern Illinois University Edwardsville, USA)

Brian Janz (*The University of Memphis, USA*)

Damien Joseph (Nanyang Technological University, Singapore)

Janet Kourik (Webster University, USA)

Sven Laumer (Otto-Friedrich-University Bamberg, Germany)

Diane Lending (James Madison University, USA) Chuck Litecky (Southern Illinois University, USA) Christian Maier (University of Bamberg, Germany)

Jo Ellen Moore (Southern Illinois University, Edwardsville, USA)

Gaetan Mourmant (*University of Strasbourg, France*)

Fred Niederman (Saint Louis University, USA)

Susanne J. Niklas (RheinMain University of Applied Sciences, Germany)

Lorne Olfman (Claremont Graduate University, USA)

Irene Petrick (The Pennsylvania State University, USA)

Norah Power (*University of Limerick, Ireland*)

Ijaz Qureshi (Iqra University, Pakistan)

Cindy Riemenschneider (Baylor University, USA)

Sherry Ryan (*University of North Texas, USA*)

Sureerat Saetang (University of South Australia, Australia)

Rahmath Safeena (Taif University, Saudi Arabia)

Xiqing Sha (National University of Singapore, Singapore)

Janice Sipior (Villanova University, USA)

Derek Smith (*University of Cape Town, South Africa*)

Mary Sumner (Southern Illinois University Edwardsville, USA)

Stefan Tams (HEC Montréal, Canada)

Eileen Trauth (*The Pennsylvania State University, USA*)

Karthikeyan Umapathy (*University of North Florida, USA*)

Faith-Michael Uzoka (*University of Botswana, Canada*)

Susan Yager (Southern Illinois University Edwardsville, USA)

SIGMIS CPR 2012 Sponsor & Supporters



Supporters:







