

Annual Report 2019 -- ACM SIGMIS

Submitted by Fred Niederman, SIG Chair, August 23, 2019

Overall, the ACM SIGMIS is extremely viable and vibrant. We do face some challenges with both strengths and areas of growth are discussed below.

1. Awards that were given out

This year SIGMIS had two new awards approved by ACM's governing board. The first, a lifetime achievement award was presented for the first time to Ephraim R. McLean, Ph.D., Regents' Professor and George E. Smith [GRA] Eminent Scholar's Chair in Information Systems, Robinson College of Business, Georgia State University. The nomination letter is presented below in appendix 1.

The second new award was not presented due to late notice prior to our annual conference. We have, however, assigned a chair to the nomination and selection committee, Dr. Mike Gallivan, a long time SIG member who is examining scientometric tactics for identifying promising candidates.

Conference Awards were:

Magid Igbaria best paper award: When Agile Means Staying: Examining the Relationship Between Agile Development Usage and Individual IT Professional Outcomes by Tenace Setor (University of Nebraska Omaha), and Damien Joseph (Nanyang Technological University)

Doctoral travel reimbursement scholarship recipients for our annual conference were: Faiz Ahamad (Tata Institute of Social Sciences), Bernie Fabito (De La Salle University), and Rui Sundrup (University of Cincinnati).

Best poster award: What Motivates You? Linking Enterprise Social Media Use, Gratification, Performance and Well Being by Jeanetta Grover (Trident University).

DATABASE Recognitions were:

In December 2018, we awarded Senior Editor of the Year for 2018 to Pratyush Bharati and Reviewer of the Year to Amy Connolly. In December 2018, we recognized Puzant Balozian and Dorothy Leidner for Paper of the Year (published in 2017).

2. Significant papers on new areas that were published in proceedings

The annual conference was highlighted by the Keynote talk: *Were You There When??* By Dr. Ephraim R. McLean. The session reviewed key events in the history of MIS which were largely observed and participated in by Dr. McLean. This was universally noted as highly educational both for newcomers and middle career people.

Program Chairs' report • Theme: Enduring Issues in MIS and Work • Program committee (reviewers) comprised of over 55 people from around the world. • Submissions: - 42 submissions in total - 29 accepted papers - Acceptance rate of 69% - 34 accepted papers and posters - Acceptance rate of 80% •

Significant panels included:

(1) *Technology Entrepreneurship in the Digital Age*, presented by panelists: J.P. Allen, T. Paul Thomas, and Jonathan Ford. Content focused on how our lives are increasingly touched by almost-ubiquitous information technology. Entrepreneurial enterprises, rather than traditional conglomerates developed much of this technology. Although entrepreneurship has long existed, the digital age has influenced the nature and impacts of entrepreneurship. The panel will consider questions related to the nature of entrepreneurship in the digital age, as well as issues related to the environment in which entrepreneurship exists, and its impact on the nature of work in the future.

(2) *The Future of the IT Workforce*, presented by panelists: Manuel Wiesche; Damien Joseph Manju Ahuja; Mary Beth Watson-Manheim; and Nishtha Langer. This panel discussed a wide range of views on the future of the IT workforce at the heart of our discipline. It addressed how technological, organizational, and environmental trends will affect the IT workforce. Based on these changes, it explored how IT workforce research need to advance discuss fruitful directions.

From among a wide variety of papers, two that stood out and illustrate the range of topics the membership addresses were:

(1) *Integrating Development and Operations in Cross-Functional Teams – Toward a DevOps Competency Model*, presented by Anna Wiedemann, Manuel Wiesche, and Helmut Krcmar. This paper dealt with the integration of cross-functional teams for new product development is still an elusive aim. Cross-functional information technology (IT) teams are used to provide new initiatives in fast-changing and challenging environments. Moreover, concepts such as Development and Operations (DevOps) appear in practice and bring software development and operations tasks in one team. Organizations are currently searching for necessary, suitable competencies for setting up high collaborative cross-functional teams that manage the tasks of the software delivery lifecycle. Therefore, in this paper, employing a multi-perspective research approach, we conducted a workshop and a multiple-case study. Hence, this paper presents a competency model for enabling a high level of collaboration within a team and explains how these competencies are implemented in IT functions. Additionally, we identified six competencies and two major challenges associated with DevOps team setups.

(2) *Sustaining the IT Workforce: A Review of Major Issues in 25 Years and Future Directions*, presented by Caroline E. Oehlhorn, Sven Laumer, and Christian Maier. This presentation looked forward to issues facing employers attracting, recruiting and retaining a sufficient number of information technology professionals which remains a key issue for organizations. Although research and practice call upon this issue for quite some time and suggest various interventions, the shortage of qualified IT professionals does not decline, but seems to increase. Thus, sustaining the IT workforce represents a recurring issue faced with challenges that are fixed firmly within the domain. This literature review identifies the major issues related to sustaining IT professionals from a human resource management perspective. Sixty-seven research articles from the AIS Senior Scholars' basket are reviewed to identify the major issues

respectively to the past times from the dot com boom during the 1990s, across industry recession in 2001 up to the present day. Four major issues are explained and discussed.

3. Significant programs that provided a springboard for further technical efforts

In 2018 we awarded the first grants as part of the new research grant award program. These were awarded to two scholars who both completed their research and presented their work at the annual conference in Nashville.

The first was entitled: *Blockchain Ethics Research: A Conceptual Model* authored by Yong Tang; Jason Xiong; Rafael Becerril-Arreola; and Lakshmi Iyer. The research focused on Blockchain being widely adopted far beyond finance into numerous domains of society and promises unprecedented potential to disrupt organizations, businesses, industries, and economies. However, Blockchain is still in its infancy and its future is highly controversial, arousing phenomenal enthusiasm, high expectations, and even intense criticism. The possible impacts of Blockchain and its applications on the society could be fundamental and revolutionary, inevitably bringing unpredicted ethical challenges in the foreseeable future. Identifying the ethical challenges of Blockchain is urgent and critically needed to ensure that Blockchain is adopted ethically. However, discussions on the ethics of Blockchain are largely insufficient, which leaves a void of theoretical understanding so far. In this paper, we provide a systematic discussion on the ethics of Blockchain applications and map the main social challenges raised by its technology and applications. The paper starts with a review of the technological concepts and applications of Blockchain. Then, it overviews the current research on the ethics of technologies and general research on Blockchain to briefly introduce the authors' approach. Afterwards, a conceptual model of Blockchain ethics research is developed. This research hopes to serve as an initial roadmap for the study of Blockchain ethics, and to raise timely awareness and stimulate further debate on the ethics of Blockchain in the IS community.

The second is *What Makes Us IT People? Autistic Tendency and Intrinsic Interests in IT* authored by Ronnie Jia and Heather H. Jia. They ask: What makes us IT people? Why are certain individuals more intrinsically interested in IT than others? The existing IS literature offers few answers about origins of such interest as most research models treat it as an exogenous variable and focus almost exclusively on its consequences in user attitudes and behavior. Building on the autism research literature, this study aims to establish autistic tendency as an antecedent of one's intrinsic interests in IT. Results of this research may have several implications. In addition to examining intrinsic interest in IT as a user trait and contributing to the adoption literature, this work also explores it as potentially a distinguishing characteristic of IT professionals, researchers and students, thus contributing to the perennial discussion of "Are IS people different?"

Due to vacations and a number of committee members being unavailable during the annual conference, we are still in the midst of evaluating the two submitted papers for this year's research grant process. It was a bit disappointing to only receive two applications, however, we are looking at ways to improve our distribution of the call for proposals next year and for coming years.

4. Innovative programs which provide service to some part of your technical community

At this year's conference, we presented a portion of an NSF funded play that illustrates and brings to life the issues facing young women considering a technical career. This play provided insights that are not easily conveyed with traditional research and presentations. The activity was called: Addressing Social Inclusion in the IS Field through Theatre and is based on the play by Eileen Trauth. The following individuals took part in bringing the play to life: Eileen Trauth; Allison Bryant; Curtis Cain; Leigh-Ellen Potter; Jeria L. Quesenberry; Suzanne Trauth and Craig van Slyke. The play, iDream, was written to communicate through characters, plot and dialogue the results of NSF-funded research about young women experiencing, internalizing and overcoming barriers to inclusion in the information technology fields. The purpose of using theatre is to create awareness, stimulate attitude change, and inspire action about the IT profession and who can participate in it. This panel employs the play, iDream, as a vehicle to inspire dialogue among members of the SIGMIS community and beyond about ways to address social inclusion issues in the information systems field. A staged reading of selected scenes from the play is performed by members of the ACM SIGMIS community. This is followed by a panel discussion with the actors/panelists and members of the audience about the themes in the play and what can be done to address them.

5. Events or programs that broadened participation either geographically, or among under-represented members of your community and;

This year a new undergraduate program was added to the SIGMIS activities. Hollis Greenberg of Wentworth Institute of Technology serves as advisor to the new group. Seven of these students attended the annual conference in Nashville and presented superb poster presentations regarding their on-going research.

Our annual Doctoral Consortium was conducted prior to the annual conference and featured a highly diverse group of participants. We had 16 doctoral student applicants of whom 8 were selected for participation. Co-Chairs and Faculty Mentors for the event were: Indira Guzman (Trident University International), Michelle Kaarst-Brown (Syracuse University), Shuyuan "Mary" Ho (Florida State University), Stacie Petter (Baylor University), Sven Laumer (Friedrich-Alexander-Universität Erlangen-Nürnberg), and Tim Jacks (Southern Illinois University - Edwardsville). Student Participants were: Asif Shaikh (Florida State University), Faheem Ahmed Shaikh (Nanyang Technological University), Jeanetta Grover (Trident University), Jens Mattke (University of Bamberg, Germany), Katharina Pflugner (University of Bamberg, Germany), Kerri Ludwig (Trident University), Mashael Almoqbel (New Jersey Institute of Technology), and Sahar Farshadkhah (Louisiana Tech University).

We also co-sponsor the ICIS conference each December where we support the best doctoral dissertation in information systems award, host a reception, and staff a booth primarily to promote our publication, DATABASE. We also fund the annual best PhD dissertation award for AIS. This year we are scheduled to visit with the ICIS doctoral consortium participants to introduce them to our programs and invite their participation.

We are planning the 2020 conference to be in Nuremberg Germany. This continues a tradition of frequent annual meetings outside the US.

6. A very brief summary of the key issues that SIG membership will have to deal with in the next 2-3 years.

Our publication, DATABASE, continues a concerted marketing campaign of research conference visibility focused on impact and intellectual innovation. We have distributed 4 issues regularly for many years. This year (2018) we added a 5th issue focused on cybersecurity which has already been distributed. Note also that we produced a 50th anniversary special issue published in January 2019. This issue chronicles much of history of our group and its journey with ACM. This year the term of our co-editors concluded. We have retained one of the co-editors, Thomas Stafford, and have added a new one, Deborah Armstrong. We will be expressing our thanks for excellent service to Stacie Petter at our annual reception at ICIS this December. A key issue going forward will be the adjustment of the publication to new leadership and perhaps some fine tuning of directions. Note that in recent years a new section of philosophy of science and another on research methods, particularly path analysis have been added to updating the strategic direction of the publication. Note also that submissions continue to increase, pressuring the review system, however, editors are recruiting new associate editors as needed. We are also moving from requiring university host institutions from funding publication related expenses such as proofreading and hosting booths at key conferences to taking these on within the SIG. We expect that this will improve performance, but will also require seeking a new offsetting set of revenue streams.

SIGMIS has a Facebook page (<https://www.facebook.com/acmsigmis>) and a LinkedIn profile (<https://www.linkedin.com/groups/5148399>) and our new Twitter account (<https://twitter.com/acmsigmis>). As these are relatively new, we haven't yet developed a thorough sense of their effectiveness or how to best use them to communicate the right amount and type of information with members, but we continue to enhance our presence in the social media arena.

The current slate of officers has begun serving a two year term in 2019, however, it is unlikely that all of them would want to continue on in current roles. Thus we will need to both recruit potential candidates and very actively create the process for electing a new set of officers.

We have begun the planning for the 2021 conference and are considering returning to a rotation from western US, to Midwest, to East Coast, to Germany (or alternative outside of US site). The idea is to be able to schedule further ahead and to regularize our conference processes.

Damien Joseph has assumed leadership of the in-cooperation program with other groups seeking our support relative to their conferences. It turns out there are a much larger number than expected of requests in this area and we want to redesign our approach. It takes some effort to evaluate each of these in detail and decide whether our support is warranted as well as how to generate more benefit to our members.

We have begun a process of seeking out collaborations with AIS special interest groups particularly regarding leadership and diversity/inclusion. The strategy is to make focused events and activities of interest to ACM SIGMIS members available before or during all major MIS conferences – ICIS, HICSS, AMCIS, ECIS, and PACIS – as well as our own stand alone conference. This is slower going than expected but I anticipate will continue to grow over the next few years.

In terms of strategy, we have reasserted central interest in IS personnel, leadership, and inclusion. We also welcome for both the conference and publication a wide range of MIS topical

areas including ethics, all aspects of work, and IS entrepreneurship. The question will be whether it will be more effective to focus more narrowly on traditional topics or to continue expanding the range of issues we deal with.

We continue seeking a way that allows AIS and ACM to extend distribution of DATABASE to AIS members. Due to the nature of revenue streams and business models, these discussions are sensitive but we are hopeful that this can be developed as a greater conduit for mutual benefit.

Appendix 1.

Nomination for Lifetime Achievement Award – Eph McLean

(nominated by Senior member of the SIG)

It is with great pleasure that I wish to nominate Ephraim (Eph) R. McLean for the SIGMIS Lifetime Achievement Award. Ephraim McLean has been heavily involved in multiple organizations that are related to the discipline of information systems, including the Association for Computing & Machinery, the Association for Information Systems, among many others. Dr. McLean has been active in multiple ACM SIGs over the years, including SIG MIS (previously named SIGBDP and SIGBIT) and SIG CPR (before and after these SIGs merged).

Within SIGMIS, Dr. McLean served as an Associate Editor for The DATA BASE in Advances in Information Systems in 1990 and became co-Editor-in-Chief of the publication in 1994. He served in this editorial capacity for 8 years with two different co-editors. Eph has stayed involved with the publication by continuing to serve as a member of the Preeminent Editorial Board. In 1997, Dr. McLean (along with a co-author) was recognized by SIG CPR for their 10-year contribution to computer personnel research. In 2007, ACM selected Dr. McLean as a Distinguished Lecturer.

Eph McLean's research has been cited nearly 33,000 times according to Google Scholar, with his most cited paper and stream of papers related to the Information Systems Success Model. He has published books, textbooks, and dozens of articles over the past six decades that have appeared in the top journals and conferences in the information systems discipline.

Dr. McLean has also been recognized for his teaching on multiple occasions. In 1998, he was the first winner of the CIS Department's Myron Greene Award for Outstanding Teaching. In 2003, he was honored as the "Information Systems Educator of the Year" by the Association of Information Technology Professionals. He has also mentored numerous doctoral students as a dissertation chair, committee member, or formal or informal mentor.

It is without question that Eph McLean's extensive involvement in the information system field over the past six decades has shaped the research and practice of information systems. Not only is Dr. McLean an exceptional scholar and teacher, but he is a wonderful colleague. He is friendly, kind, and has a positive outlook. He has positively influenced and supported many scholars' careers, including my own. As a result, I cannot think of anyone that is more deserving of the first SIGMIS Lifetime Achievement Award.

Endorsed by additional members: May 23, 2019 and May 24, 2019

Appendix 2

Please see PDF file attached separately of business meeting notes for 2019.