The Journal of Computing Sciences in Colleges

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Papers of the Nineteenth Annual CCSC South Central Conference

April 18-19, 2008
Texas A&M University – Corpus Christi
Corpus Christi, Texas

Papers of the Inaugural CCSC Southwestern Conference

April 18-19, 2008
California State University - Northridge
Northridge, California

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FOREWORD

This last issue of Volume 23 of the *Journal* is special in that it includes the papers of our newest conference, the Southwestern regional conference. The Consortium can now truly say that it covers the complete contiguous 48 states of the United States. Maine in the northeast corner is a part of the New England region (a Spring conference) and well represented at their conference, while Florida falls into the Southeastern region (a Fall conference.) Looking at the west coast, the Pacific northwest falls into the Northwestern region (a Fall conference), and with the new Southwestern region and their Spring conference southern California is represented. While we cannot sponsor conferences in everybody's back yard there is at least one conference per year within reasonable distance of all of the membership. The largest region remains the Rocky Mountain region. For a visual overview visit http://ccsc.org/events/conferences.htm. That site also contains informa-tion about upcoming conferences.

As we were looking toward coordinating publishing of the papers of a new region that was nine time zones away and more than a third of the world from where I'm located I had a good amount of concern and trepidation. A lot of communication goes on with the regional editor as we try to bring everything into a common format and appearance. The *Journal* has had a consistent appearance now for two decades, and we wanted that preserved. (A side note, there was one change made over 15 years ago and that was a slight increase in the font size.) My concerns ended up totally unfounded. Maria Zack, the conference chair, and Lori Carter, the regional editor, proved most responsive. Yes, we might have an overnight lag in communications, but it never extended longer than that. Quite frequently we were communicating back and forth in real time as they were starting their days and I was back home working on papers after a full day at the office. It really was a pleasure working with such a very responsive team. Of course it was with the contributions of the regional elected officers and the conference committee that such an excellent program was put together.

Then there's South Central, one of the more established regions presenting their 19th

conference. It seems hard to believe that that region is almost two decades old. How vividly I remember those first conferences when we communicated via telephone and the US mail with manuscripts coming on floppy disks. Electronic data transmission has really streamlined the assembly of the *Journal*. In addition, South Central also has an excellent team to work with. How much can I say for Laura Baker? We've been working together now for several years, along with Ken Hartness. Both have been most helpful. What does make a difference, though, is that we've worked together before and have a feeling for what is needed by whom and when.

As I look back over the past year and assembling the papers for ten different conferences into six issues of the *Journal* it's been a good year. My thanks to the folks that I work with from all ten conferences – they are all super teams. Then there are the folks on this end, Susan Dean who helps with assembly of the *Journal* as well as provides a fresh set of eyes for proofing. When scanning of a figure is needed, which happens all too often, Susan accomplishes the scan with minimal time delay. The proofing, though, is a critical item, and that fresh set of eyes. George Benjamin does a wonderful job of coordinating the printing logistics back in the States. He checks the blue line (where another fresh set of eyes is essential) and we fix the last minute finds. Are we ever going to produce perfection? We strive to do so, but invariably something slips the many sets of eyes that check the final copy. My apologies for that. We do our best, but when you consider the number of pages of copy that we're checking in short time something can always slip through.

Probably the biggest headache for George is the logistics of distribution of the *Journal*. He determines the print run and how many copies go to each conference as well as how many are shipped directly to him for distribution to the membership of the Consortium. He then accomplishes the printing of the Newsletter, stuffing the Newsletter with the *Journal*, printing mailing labels, and labeling the individual issues of the *Journal*. My thanks to George for his continued service for now fifteen years.

My thanks also go to the folks at Montrose Publishing, our printer. They have always been most responsive and helpful. As an example, two issues of the *Journal* were recently released to them and within 48 hours the blue line was in George's hands for checking. The blue line must go through the US postal system, so the fact that the manuscripts were released almost 5000 miles away and the blue line was in George's hands so quickly demonstrates their responsiveness.

Then there's the membership. Without you there would be no Consortium. Without the authors there would be no *Journal*. Without those serving on the conference committees and the regional boards there would be no conferences. My sincere thanks to all of you.

We're already looking ahead to the next academic year, 2008-2009. Check out the list of conferences for the Fall. While we need to plan well ahead of time it's not too late to contribute to next year's conferences.

It's a pleasure to present you with the last issue of Volume 23 of the *Journal*, two more sets of conference proceedings, an excellent two sets of papers.

John Meinke, UMUC – Europe
CCSC Publications Chair

Papers of the Nineteenth Annual CCSC South Central Conference

April 18-19, 2008
Texas A&M University – Corpus Christi
Corpus Christi, Texas

WELCOME TO THE NINETEENTH ANNUAL (2008) CCSC SOUTH CENTRAL CONFERENCE

Welcome to the 19th annual meeting of the South Central Region of the Consortium for Computing Sciences in Colleges. On behalf of the CCSC:SC Steering Committee we wish to thank all of the authors, panelists, tutorial leaders, speakers, student presenters, and reviewers who helped us to build an interesting and exciting program for this year's conference. We greatly appreciate the generous time and effort given by the faculty, staff, and students of Texas A&M University Corpus Christi who are hosting this year's conference and have done a terrific job in planning and preparing for the conference.

This year twenty professional papers, six tutorials, and two pre-conference workshops were accepted for publication and presentation. We use a double-blind paper review process and each paper is reviewed by three independent reviewers. There were 45 papers submitted and 20 were accepted for a 44% acceptance rate. We really appreciate the time and effort put into our reviewing process by 53 reviewers from across the region and country.

We hope you enjoy the conference and scenery at Corpus Christi and we encourage you to participate as an author, reviewer, or attendee in the future. We welcome and encourage members to become conference hosts and to invite colleagues to join the consortium.

Laura J. Baker, Papers/Program Chair
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KEYNOTE ADDRESS

Friday, April 18, 2008

WHERE IS TECHNOLOGY HEADING IN THE FINANCIAL SERVICES MARKET?

John W. Brady
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USAA Information Technology

Papers of the Inaugural CCSC Southwestern Conference

April 18-19, 2008
California State University – Northridge
Northridge, California

WELCOME TO THE INAUGURAL (2008) CCSC SOUTHWESTERN CONFERENCE

The members of the Southwestern Regional Board and Conference Steering Committee welcome you to the inaugural Consortium for Computing Sciences in Colleges (CCSC) Southwestern Conference at California State University at Northridge. We have spent the last year organizing this gathering and hope that you find it intellectually stimulating and professionally rewarding.

We are fortunate to have Dr. Jane Margolis from the University of California at Los Angeles as our keynote speaker. Dr. Margolis is a social science researcher who has been examining issues of underrepresentation in computer science for the last 14 years and she will be sharing some of her insights in her talk "Unlocking the Clubhouse: Gender, Race, Education and Computing."

In planning our conference, we utilized Dr. Henry Walker's ACM SIGCSE paper submission website. His assistance was a gift to this newly established region of CCSC. We had 19 papers submitted for consideration. With the assistance of 54 reviewers, each paper was reviewed by between 3 and 7 members of our review panel. 12 papers were accepted for presentation at the conference and publication in the journal. In addition, we had four tutorials and panel discussions that were submitted and reviewed. Four of those five will be presented at the conference.

This year we are hosting both a student poster session and a student programming contest. We hope that this event will showcase the talent of our students and provide encouragement for them in their study of computer science.

Thank you for participating in our inaugural conference. If you have any questions or comments please feel free to contact the CCSC-SW Board or Conference Steering Committee members.

Maria Zack, Point Loma Nazarene University
2008 CCSC-SW Conference Chair

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KEYNOTE ADDRESS

Friday, April 18, 2008

UNLOCKING THE CLUBHOUSE: GENDER, RACE, EDUCATION AND COMPUTING

Jane Margolis, UCLA

Jane Margolis is a UCLA social science researcher who has been examining issues of underrepresentation in computer science for the last 14 years.

Her research began at Carnegie Mellon University, in a four year study of the gender gap in computer science, and resulted in the book Unlocking the Clubhouse: Women in Computing, co-authored with Allan Fisher (MIT Press, 2000). From 2000 to the present she has been involved in research in several Los Angeles public high schools examining why so few African American and Latino/a students are learning computer science. She is the Principal Investigator of a National Science Foundation Broadening the Participation in Computer Science award to build a University/K-12 partnership to increase and enhance the computer science learning opportunities in LA public high schools. She is the lead author of an upcoming book Stuck in the Shallow End: Race, Computing and Education. Margolis is a 2005 recipient of the CRA Habermann Award for Diversity in Computing.