# Cyber Security Workforce in the Global Context

**Thursday, June 4, 2015**

<table>
<thead>
<tr>
<th>TIME</th>
<th>EVENT / SESSION AND LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM – 8:30 AM</td>
<td><strong>Registration and Breakfast Buffet</strong> (Doctoral Consortium participants only)</td>
</tr>
<tr>
<td></td>
<td>Location: Palm Court</td>
</tr>
<tr>
<td>8:30 AM – 12:00 PM</td>
<td><strong>Doctoral Consortium</strong></td>
</tr>
<tr>
<td></td>
<td>Location: Newport Bay 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>Chairs: Lorne Olfman (<em>Claremont Graduate University</em>), and Damien Joseph (<em>Nanyang Technological University</em>)</td>
</tr>
<tr>
<td></td>
<td>Students: Gloorise Haya (<em>Claremont Graduate University</em>), Hadi Karimi Kia (<em>Auckland University of Technology</em>), Joseph Taylor (<em>Washington State University</em>), Jose Angeles (<em>Trident University</em>), John Magrane (<em>Trident University</em>), and Kayla Booth (<em>Penn State University</em>)</td>
</tr>
<tr>
<td></td>
<td>• Faculty Mentors: Tonia San Nicholas-Rocca (<em>San Jose State University</em>), Harminder Singh (<em>Auckland University of Technology</em>), Indira R. Guzman (<em>Trident University</em>)</td>
</tr>
<tr>
<td>12:00 pm – 1:30 pm</td>
<td><strong>Lunch</strong></td>
</tr>
<tr>
<td></td>
<td>Location: – Palm Court</td>
</tr>
<tr>
<td>2:00 PM – 3:30 PM</td>
<td><strong>Cybersecurity Workforce Development Panel</strong></td>
</tr>
<tr>
<td></td>
<td>Location: Newport Bay 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>Panel Moderator: Indira R. Guzman (<em>Trident University</em>)</td>
</tr>
<tr>
<td></td>
<td>Panelists: Thomas Hilton (<em>University of Wisconsin-Eau Claire</em>), Shuyuan Mary Ho (<em>Florida State University</em>), Diane Lending (<em>James Madison University</em>), Jason James (<em>VP Risk Evantix</em>) and Michelle Kaarst-Brown (<em>Syracuse University</em>)</td>
</tr>
<tr>
<td>3:30 PM – 4:00 PM</td>
<td><strong>Afternoon Break</strong></td>
</tr>
<tr>
<td></td>
<td>Location: – – Palm Court</td>
</tr>
<tr>
<td>4:00 PM – 5:30 PM</td>
<td><strong>Industry Perspectives on Cybersecurity Workforce Development Panel</strong></td>
</tr>
<tr>
<td></td>
<td>Location: Newport Bay 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>Panel Moderator: Daniel Manson (<em>California State Polytechnic University</em>)</td>
</tr>
<tr>
<td></td>
<td>Panelists: Jonathan Chow (<em>Live Nation Entertainment</em>), Eric Crutchlow (<em>FireEye, Inc.</em>), Justin Cain (<em>California Office of Emergency Services</em>)</td>
</tr>
<tr>
<td>6:00 PM – 9:00 PM</td>
<td><strong>Welcome Reception</strong></td>
</tr>
<tr>
<td></td>
<td>Pacific 1&amp;2</td>
</tr>
</tbody>
</table>

**This 2015 ACM SIGMIS Computers and People Research Conference is supported and sponsored by:**
<table>
<thead>
<tr>
<th>TIME</th>
<th>EVENT / SESSION AND LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM – 8:30 AM</td>
<td><strong>Breakfast Buffet and Registration</strong>&lt;br&gt;Location: Palm Court</td>
</tr>
<tr>
<td>8:30 AM – 10:00 AM</td>
<td><strong>Session I: Gaming and Competition</strong>&lt;br&gt;Location: – Newport Bay 1 &amp; 2&lt;br&gt;Chair: Dennis Allen (<em>Software Engineering Institute</em>)&lt;br&gt;• Video Games as a Training Tool to Prepare the Next Generation of Cyber Warriors by Christopher Herr (<em>Software Engineering Institute</em>), and Dennis Allen (<em>Software Engineering Institute</em>).&lt;br&gt;• A Vignette-based Method for Improving Cybersecurity Talent Management through Cyber Defense Competition Design by David Tobey (<em>Indiana University South Bend</em>).</td>
</tr>
<tr>
<td></td>
<td><strong>Session II: Digital Inequality</strong>&lt;br&gt;Location: – Newport Bay 3&lt;br&gt;Chair: Eileen Trauth (<em>Pennsylvania State University</em>)&lt;br&gt;• Understanding Career Choice of African American Men Majoring in Information Technology by Kadeem Fuller (<em>University of Southern Alabama</em>), Lynette Kvasny (<em>Pennsylvania State University</em>), Eileen Trauth (<em>Pennsylvania State University</em>), and K. D. Joshi (<em>Washington State University</em>).&lt;br&gt;• Does Competitor Grade Level Influence Perception of Cybersecurity Competition Design Gender Inclusiveness? By Jason Pittman (<em>California State Polytechnic University</em>).</td>
</tr>
<tr>
<td>10:00 AM – 10:30 AM</td>
<td><strong>Morning Break</strong>&lt;br&gt;Location: Palm Court</td>
</tr>
<tr>
<td>10:30 AM – 11:50 PM</td>
<td><strong>Session III: Cyber Security Skills</strong>&lt;br&gt;Location: – Newport Bay 1 &amp; 2&lt;br&gt;Chair: Art Gowan (<em>James Madison University</em>)&lt;br&gt;• Characterizing the Traits of Top-Performing Security Personnel by Jordan Shropshire (<em>University of South Alabama</em>), and Art Gowan (<em>James Madison University</em>).&lt;br&gt;• Lessons from the Strategic Corporal - Implications of Cyber Incident Response by Antoine Lemay (<em>École Polytechnique de Montréal</em>), Sylvain P. Leblanc (<em>Royal Military College of Canada</em>), and Tiago de Jesus (<em>Carleton University</em>).&lt;br&gt;• What Skills do you Need to Work in Cyber Security? A Look at the Australian Market by Leigh Ellen Potter (<em>Griffith University</em>), and Gregory Vickers (<em>Griffith University</em>).</td>
</tr>
<tr>
<td></td>
<td><strong>Session IV: Team Issues</strong>&lt;br&gt;Location: – Newport Bay 3&lt;br&gt;Chair: Anik Bose (<em>Indian Institute of Management Bangalore</em>),&lt;br&gt;• The Missing Circle of ISMS (LL-ISMS) by Masoud Hayeri Khyavi (<em>Research Institute for ICT (Iran's Telecommunication Research Center)</em>), and Mina Rahimi (<em>Research Institute for ICT (Iran's Telecommunication Research Center)</em>).&lt;br&gt;• IT Surveillance and Social Implications in the Workplace by Mohammad Mohammad (UWS).&lt;br&gt;• Exploring Green IT Awareness and Adoption among Indian Students by Rajendra Bandi (<em>Indian Institute of Management Bangalore</em>), Anik Bose (<em>Indian Institute of Management Bangalore</em>), and Ashay Saxena (<em>Indian Institute of Management Bangalore</em>).</td>
</tr>
<tr>
<td>12:00 PM – 1:30 PM</td>
<td><strong>Keynote Address: Key Traits of Successful Cyber Security Practitioners by Mark Graff (Tellagraff)</strong>&lt;br&gt;Lunch and Awards Presentation&lt;br&gt;Location: Pacific 1&amp;2</td>
</tr>
</tbody>
</table>

This 2015 ACM SIGMIS Computers and People Research Conference is supported and sponsored by:
<table>
<thead>
<tr>
<th>TIME</th>
<th>EVENT / SESSION AND LOCATION</th>
<th>TIME</th>
<th>EVENT / SESSION AND LOCATION</th>
</tr>
</thead>
</table>
| 1:40 PM – 3:00 PM  | **Panel: Is Managing IT Security a Mirage?**  
Location: – Newport Bay 1 & 2  
Panel Moderator: Conrad Shayo *(California State University, San Bernardino)*  
- Panelists: Javier Torner *(California State University, San Bernardino)*, Frank Lin *(California State University, San Bernardino)*, Jake Zhu *(California State University, San Bernardino)*, Joon Son *(California State University, San Bernardino)*  
**Panel: Cybersecurity Competitions in Education: Engaging Learners through Improved Game Balance**  
Location: – Newport Bay 3  
Panel Moderator: David H Toby, *(Holy Cross College)*  
- Panelists: Portia Pusey, EdD *(Cybersecurity Competition Federation)*, Josh Chin *(Net Force)* | 3:00 PM – 3:30 PM  | **Afternoon Break - depart for optional tour to UC-Irvine**  
Location: – Palm Court                                                                                                                                                                                                                                                                                                                                                                            | 3:00 PM – 5:00 PM  | **Session V: Poster Session and Tour**  
Location: – Palm Court  
Session Chair: Daniel Manson *(California State Polytechnic University)*  
- Insider Threat: Language-action Cues in Group Dynamics by Shuyuan Mary Ho *(Florida State University)*, Hengyi Fu *(Florida State University)*, Shashanka S. Timmaraju *(Florida State University)*, Cheryl Booth *(Florida State University)*, Jung Hoon Baeg *(Florida State University)*, and Muye Liu *(Florida State University)*  
- An Efficient Approach to Develop an Intrusion Detection System Based on Multi Layer Backpropagation Neural Network Algorithm by Manojit Chattopadhyay *(IIM Raipur)*, Nilanjan Sen *(Pailan College of Management & Technology)*, and Rinku Sen *(NSHM Kolkata)*  
- The Cybersecurity Competition Federation by Daniel Manson *(Cal Poly Pomona)*, Portia Pusey *(Cybersecurity Competition Federation)*, Mark Hufe *(Wilmington University)*, James Jones *(Mid-Pacific ICT (MPICT) Center)*, Daniel Likarish *(Regis University)*, Jason Pittman *(Cal Poly Pomona)*, and David Tobey Sr. *(Indiana University South Bend)*  
- Privacy Issues and Techniques in E-Health Systems by Tina Francis *(BITS Pilani Dubai Campus)*, and Muthiya Madiajagan *(BITS Pilani Dubai Campus)*. | 6:00 PM – 9:00 PM  | **Dinner**  
Location: – Pita Jungle, 1200 Bison Avenue • Newport Beach, CA 92660  
Tel: 949-706-7711                                                                                                                                                                                                                                                                                                                                                                           |
## TIME

<table>
<thead>
<tr>
<th>TIME</th>
<th>EVENT / SESSION AND LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM – 8:30 AM</td>
<td><strong>Breakfast Buffet and Registration</strong>&lt;br&gt;Location: Palm Court</td>
</tr>
</tbody>
</table>
| 8:30 AM – 10:00 AM| **Session VI: Occupational Stress**<br>Location: – Newport Bay 1 & 2<br>Chair: Sven Laumer *(Otto-Friedrich-University Bamberg)*<br>• Professional Obsolescence in IT: The Relationships between the Threat of Professional Obsolescence, Coping and Psychological Strain by Tenace Setor *(Nanyang Technological University)*, Damien Joseph *(Nanyang Technological University)*, and Shirish C. Srivastava *(HEC Paris)*.<br>• Extending Moore’s Exhaustion Model: Including Further Dimensions of Burnout and Investigating Their Influence on Turnover Intention Among IT Professionals by Christoph Weinert *(University of Bamberg)*, Christian Maier *(University of Bamberg)*, Sven Laumer *(Otto-Friedrich-University Bamberg)*, and Tim Weitzel *(University of Bamberg)*.  
**Panel: Preparing the next generation of computer personnel**<br>Location: – Newport Bay 3<br>Panel Moderator: Leigh Ellen Potter *(Griffith University)*<br>• Panelists: Diane Lending *(James Madison University)*, Michelle Kaarst-Brown *(Syracuse University)*.  |
| 10:00 AM – 10:30 AM| **Morning Break**<br>Location: Palm Court                                                                                                                                                                                        |
| 10:30 AM – 12:00 PM| **Session VII: Security Judgement**<br>Location: – Newport Bay 1 & 2<br>Chair: Indira Guzman *(Trident University)*<br>• Factors Affecting Individual Information Security Practices by Santos Galvez *(Trident University)*, Joshua Shackman *(Trident University)*, Indira Guzman *(Trident University)*, and Shuyuan Mary Ho *(Florida State University)*.<br>• Cracks in the Security Foundation: Employee Judgments about Information Sensitivity by Michelle Kaarst-Brown *(Syracuse University)*, and E. Dale Thompson *(Xyklon Systems, Defense Intelligence Agency)*.  
**Session VIII: Theoretical Issues**<br>Location: – Newport Bay 3<br>Chair: Nishtha Kesswani *(Central University of Rajasthan)*<br>• Using Stakeholder Knowledge for Data Quality Assessment in IS Security Risk Management Processes by Christian Sillaber *(University of Innsbruck)*, and Ruth Breu *(UIBK)*.<br>• Maintaining Cyber Security: Implications, Cost and Returns by Sanjay Kumar *(Central University of Rajasthan)*, and Nishtha Kesswani *(Central University of Rajasthan)*.  |
| 12:00 PM – 3:00 PM| **ACM SIGMIS Business Meeting and Lunch**<br>Location: – Pacific 1                                                                                                                                                            |