

# ***Workshop on Social Theory and Social Computing***

*HYATT REGENCY WAIKIKI RESORT AND SPA, EWA BALLROOM*

2424 Kalakaua Avenue, Honolulu, Hawaii, USA 96815

*May 22-23, 2010*

## **Sponsored by the Air Force Office of Scientific Research**

Coherence-Based Modeling of Cultural Change and Political Violence Project

### **Friday, May 21, 2010**

**6:30pm** Reception dinner meeting at [Sansei](#) Restaurant, 2552 Kalakaua Ave between Ohua and Paoakalani Aves., inside the Waikiki Beach Marriott Resort and Spa, about four (short) blocks in Diamond Head (east) direction from Hyatt Regency. Phone 808 931-6286.

### **Saturday, May 22, 2010**

**8:00am** Registration and Continental Breakfast

**8:30am** Welcoming Remarks and Announcements

Terence Lyons, Air Force Office of Scientific Research, Socio-Cultural Modeling  
Richard Dubanoski, University of Hawai'i, Dean, College of Social Sciences  
Sun-Ki Chai, University of Hawai'i, Department of Sociology

**8:45am** Choice-Theoretic Models

**Dennis Chong, Northwestern University, Department of Political Science**  
Dynamic Public Preferences: Framing Over Time (20 min)

**9:05am** Dana Nau, University of Maryland, Department of Computer Science

Evolution of State-Dependent Risk Preferences in Social-Modeling Games (40 min)

**9:45M** Herbert Gintis, Central European University and Santa Fe Institute, Department of Economics

Modeling the Market Economy as a Complex Dynamical System: Implications for Financial Regulation (40 min)

- 10:25am Break**
- 10:40am Computational Models**
- Yoshimichi Sato, Tohoku University, Center for the Study of Social Stratification and Inequality**  
Does Agent-based Modeling Survive in Sociology? (20 min)
- 11:00am Kunihiro Kimura, Tohoku University, Department of Behavioral Sciences**  
Explaining a Marriage Paradox: Call for the Computer Simulation Studies Based on a Simple Mathematical Model (20 min)
- 11:20am William A. Griffin, Arizona State University, Center for Social Dynamics and Complexity**  
Rules, Agents, Edges and Distributions: Requisite Components for Computational Social Science Models (40 min)
- 12:00pm Lunch served at Terrace Grill, Hyatt Regency**
- 1:30pm Rational Agents and System Design**
- Gürdal Arslan, University of Hawai`i, Department of Electrical Engineering**  
Design of Cooperative Systems (20 min)
- 1:50pm Anna Nagurney, University of Massachusetts, Department of Finance and Operations Management**  
Network Design -- From the Physical World to Virtual Worlds (40 min)
- 2:30pm Integrating Social Theory into Computational Modeling**
- Barry Silverman, University of Pennsylvania, Department of Electrical and Systems Engineering**  
Toward an Extensible Repository of Socio-Cognitive Models: Challenges for Synthesis (40 min)
- 3:10pm Break**
- 3:25pm Integrating Social Theory into Computational Modeling (cont.)**

**David L. Sallach, Argonne National Laboratories. Center for Complex Adaptive Agent Systems Simulation**

Modeling Trans-Scale Social Processes (40 min)

**4:05pm Grant Funding for Socio-Cultural Research**

**Terence Lyons, Air Force Office of Scientific Research**

Overview of AFOSR and Socio-Cultural Modeling Portfolio (40 min)

**4:45pm Wrapup**

**5:00pm Finish**

**6:30pm Conference Dinner meeting at [Seoul Jung](#), 2460 Koa Ave. 96815; inside the Waikīkī Resort Hotel, between Uluniu and Lili'uokalani Aves., about 1 block Mauka (north) and one block in Diamond Head (east) direction from the Hyatt Regency. Phone 808 922-4911.**

**Sunday, May 23, 2010**

**8:00am Registration and Continental Breakfast**

**8:30am Welcoming Remarks and Announcements**

Krystyna Aune, Associate Vice Chancellor, Office of Academic Affairs, University of Hawai'i

Sun-Ki Chai, University of Hawai'i, Department of Sociology

**8:45am Content Analysis and Opinion Mining/Sentiment Analysis**

**Kimberly A. Neuendorf, Cleveland State University, School of Communication**

Extending the Utility of Content Analysis via the Scientific Method (20 min)

**9:05am Bing Liu, University of Illinois – Chicago, Department of Computer Science**

Opinion Mining and Sentiment Analysis: NLP meets Social Sciences (40 min)

**9:45am Extending Measurement and Interpretation of Unstructured Social Data**

**R. Kelly Aune, University of Hawai`i, Department of Speech Communication**  
Status on Research Testing Communicative Responsibility Theory (20 min)

**10:05am Tony Mullen, Tsuda University, Institute for Mathematics and Computer Science**

A Strife of Interests: Challenges for Sentiment Analysis of Informal Political Discourse (20 min)

**10:25am Robert Hanneman, University of California at Riverside, Department of Sociology**

Applying Modality and Equivalence Concepts to Pattern-Finding in Social Process-Produced Data (20 min)

**10:45am Break**

**11:00am Measurement of Online Social Phenomena**

**Bo Pang, Yahoo!, Research**

A Web of Opinions: Sentiment Analysis in the Context of Online Communities (20 min)

**11:20am Huan Liu, Arizona State University, Department of Computer Science and Engineering**

Building a Social Media Tool for Sociological Studies (20 min)

**11:40am Sun-Ki Chai and David Chin, University of Hawai`i, Departments of Sociology and Information and Computer Science**

Integrating Social Science Theory and Methods into Social Computing: The CCPV Project Web Analyzer (20 min)

**12:00pm Lunch served at Terrace Grill, Hyatt Regency**

**1:30pm Integrative Projects and Statements**

**Joseph Woelfel, University of Buffalo SUNY, Department of Communication**  
Three Essays on Networks, Measurement, and Rationality (40 min)

**2:10am Klaus Krippendorff, University of Pennsylvania, Annenberg School for Communication**

The Growth of Cyberspace and the Rise of Design Culture (40 min)

**2:50pm      Break**

**3:05pm      Breakout Discussions**  
**1. Social Modeling**  
**2. Social Measurement**

**4:00pm      Presentation of Main Points of Breakout Discussions**

**One-page Reflections on Workshop Questions and/or Future Directions in  
Interdisciplinary Collaboration**

**Open Discussion and Wrapup**

**5:00pm      Finish**

**Dinner on Own**

**Mahalo!**