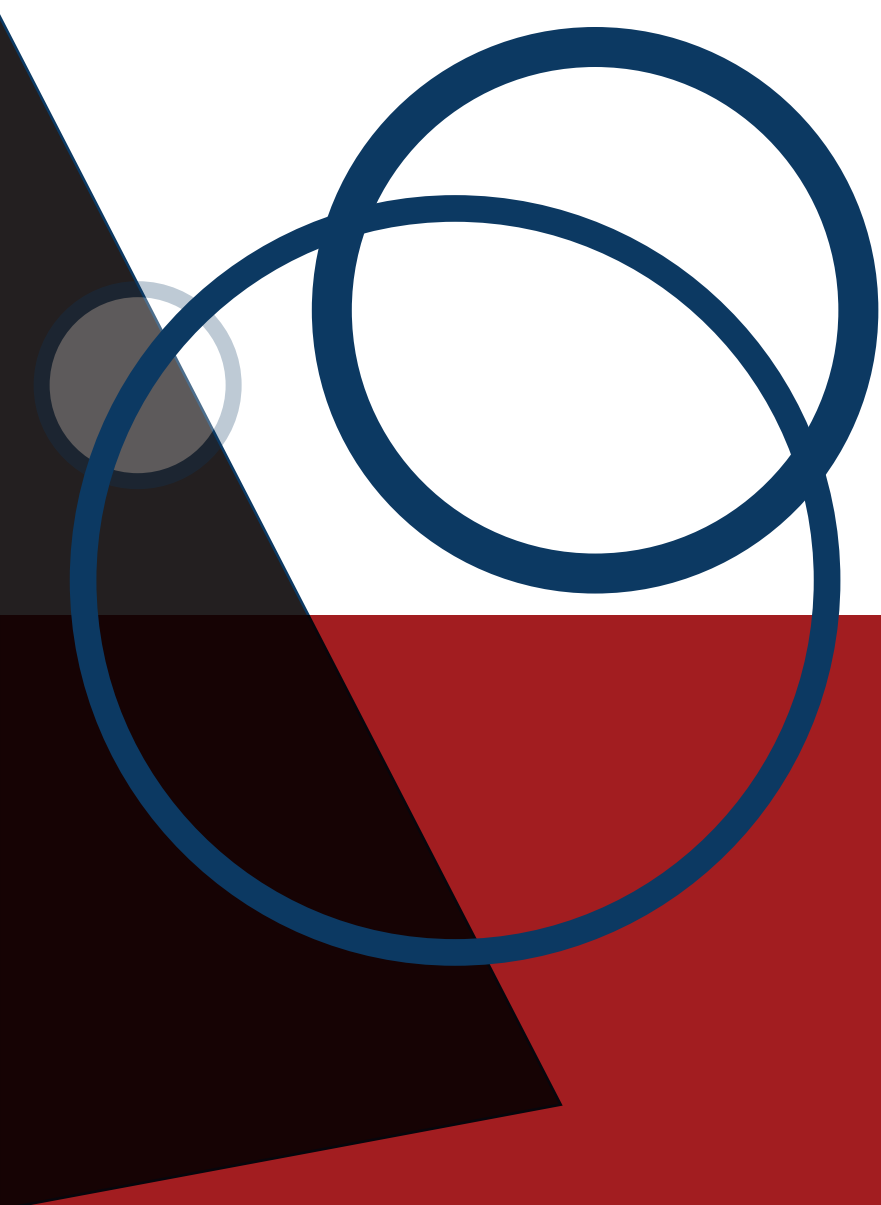


acii 2011

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organization

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Local Assistance

Lauren Coggins, Blair Lehman, Caitlin Mills, Amber Strain, Jackie Kory, Ahman Ridwan, and the staff and students of the Institute for Intelligent Systems at the University of Memphis

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Acknowledgements

The ACII 2011 conference would not have been possible without the vision and dedicated effort of a number of people who are not named here. We are indebted to the Program Committee and the Senior Program Committee for their exceptional work in reviewing the submissions and helping us select the best papers for the conference. We would also like to thank members of the Humaine Association's Executive Committee for their advice and support. Finally, thanks to the authors for sending us their best work and to all the attendees who bring ACII to life.

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Sunday, Oct 9

Registration (all day)

8:00 - 5:00 in the Lobby

Emotion in Games Workshop

9:00 - 4:45 in Room 226

Chairs: Georgios Yannakakis, Ana Paiva, Kostas Karpouzis, Eva Hudlicka

Session 1 (9:00 - 10:30)

Chair: Georgios Yannakakis

(9:00) Opening Remarks

(9:15) Emotion in Games: An Introduction, *Georgios Yannakakis, Ana Paiva, Kostas Karpouzis and Eva Hudlicka*

(10:00) Analysing the Relevance of Experience Partitions to the Prediction of Players' Self-Reports of Affect, *Hector P. Martinez and Georgios N. Yannakakis*

AM Break (10:30 - 11:00)

Session 2 (11:00 - 12:30)

Chair: Kostas Karpouzis

(11:00) Assessing Performance Competence in Training Games, *Hiran Ekanayake, Per Backlund, Tom Ziemke, Robert Ramberg and Kamalanath Hewagama*

(11:30) Effect of Emotion and Articulation of Speech on the Uncanny Valley in Virtual Characters, *Angela Tinwell, Mark Grimshaw and Debbie Abdel-Nabi*

(12:00) Improvisation, Emotion, Video Game, *Josephine Anstey*

Lunch in the Lobby (12:30 - 1:30)

Session 3 (1:30 - 3:00)

Chair: Ana Paiva

(1:30) A Game-based Corpus for Analysing the Interplay between Game Context and Player Experience, *Noor Shaker, Georgios N. Yannakakis, Stylianos Asteriadis and Kostas Karpouzis*

(2:00) Affective Preference From Physiology in Videogames: a Lesson Learned from the TORCS Experiment, *Maurizio Garbarino, Andrea Bonarini and Matteo Matteucci*

(2:30) Outline of an Empirical Study on the Effects of Emotions on Strategic Behavior in Virtual Emergencies, *Christian Becker-Asano, Dali Sun, Birgit Kleim, Corinna Scheel, Brunna Tuschen-Caffier and Bernhard Nebel*

PM Break (3:00 - 3:30)

Session 4: Panel Discussion (3:30 - 4:45)

Chair: Eva Hudlicka

(3:30) Panel Discussion: Emotion in Games: The Road Ahead, *James Lester, Nicole Lazzaro, Ana Paiva and Georgios N. Yannakakis, and Vincent Corruble*

(4:30) Closing Remarks

Sunday, Oct 9

1st International Audio/Visual Emotion Challenge and Workshop (AVEC 2011)

9:00 - 5:30 in Room 405

Chairs: Björn Schuller, Michel Valstar, Roddy Cowie, and Maja Pantic

Session 1: Opening (9:00 - 10:30)

Chair: Björn Schuller and Michel Valstar

(9:00) Opening remarks

(9:05) Invited Talk. Analysis and expression of emotions by computers, *Peter Robinson*

(10:05) AVEC 2011 - The First International Audio/Visual Emotion Challenge, *Björn Schuller, Michel Valstar, Florian Eyben, Gary Mckeown, Roddy Cowie and Maja Pantic*

AM Break (10:30 - 11:00)

Session 2: Audio-based Emotion Recognition (11:00 - 12:40)

Chair: Peter Robinson

(11:00) Investigating the Use of Formant based Features for Detection of Affective Dimensions in Speech, *Jonathan C. Kim, Hrishikesh Rao and Mark A. Clements*

(11:25) Modeling Latent Discriminative Dynamic of Multi-Dimensional Affective Signals, *Geovany Ramirez, Tadas Baltrusaitis and Louis-Philippe Morency*

(11:50) Speech Emotion Recognition System Based on l1 Regularized Linear Regression and Decision Fusion, *Ling Cen, Zhu Liang Yu and Ming Hui Dong*

(12:15) Investigating Glottal Parameters and Teager Energy Operators in Emotion Recognition, *Rui Sun and Elliot Moore*

Lunch in the Lobby (12:40 - 1:45)

Session 3: Video-based Emotion Recognition (1:45 - 3:00)

Chair: Michel Valstar

(1:45) Continuous Emotion Recognition using Gabor

Energy Filters, *Mohamed Dahmane and Jean Meunier*

(2:10) Naturalistic Affective Expression Classification by a Multi-stage Approach based on Hidden Markov Models, *Hongying Meng and Nadia Bianchi-Berthouze*

(3:35) A Psychologically Inspired Match-Score Fusion Model for Video-Based Facial Expression Recognition, *Albert Cruz, Bir Bhanu and Songfan Yang*

PM Break (3:00 - 3:30)

Session 4: Audio/Visual Emotion Recognition (3:30 - 5:30)

Chair: Björn Schuller

(3:30) Audio-Based Emotion Recognition from Natural Conversations Based on Co-Occurrence Matrix and Frequency Domain Energy Distribution Features, *Aya Sayedelahl, Pouria Fewzee, Mohamed Kamel and Fakhri Karray*

(3:55) The CASIA Audio Emotion Recognition Method for Audio/Visual Emotion Challenge 2011, *Shifeng Pan, Jianhua Tao and Ya Li*

(4:20) Dimensionality Reduction and Classification Analysis on the Audio Section of the SEMAINE Database, *Ricardo Calix, Mehdi Khazaeli, Leili Javadpour and Gerald Knapp*

(4:45) Multiple Classifier Systems for the Classification of Audio-Visual Emotional States, *Michael Glodek, Stephan Tschechne, Georg Layher, Martin Schels, Tobias Brosch, Stefan Scherer, Markus Kächele, Miriam Schmidt, Heiko Neumann, Günther Palm and Friedhelm Schwenker*

(5:10) Announcement of Results

Sunday, Oct 9

Affective Brain-Computer Interfaces Workshop (aBCI 2011)

9:00 - 5:00 in Room 430

Chairs: Brendan Allison, Stephen Dunne, Dirk Heylen, Anton Nijholt, Christian Muehl

Session 1 (9:00 - 10:30)

Chair: Christian Muehl

(9:00) Opening Remarks

(9:15) Invited Talk. Brain Dynamics and Affective Engagement, *Scott Makeig*

(10:00) Brain Dynamics of Affective Engagement in a Musical Emotion BCI, *Scott Makeig, Grace Leslie, Tim Mullen, Devpratin Sarma, Nima Bigdely-Shamlo and Christian Kothe*

AM Break (10:30 - 11:00)

Session 2 (11:00 - 12:30)

Chair: Thorsten Zander

(11:00) EEG Correlates of Different Emotional States Elicited during Watching Music Videos, *Eleni Kroupi, Ashkan Yazdani and Touradj Ebrahimi*

(11:30) Neural Correlates of Mindfulness Practice for Naive Meditators, *An Luo, Dyana Szibbo, Julie Forbes and Thomas J. Sullivan*

(12:00) Online Recognition of Facial Actions for natural EEG-based BCI Applications, *Dominic Heeger, Felix Putze and Tanja Schultz*

Lunch in the Lobby (12:30 - 1:30)

Session 3 (1:30 - 3:00)

Chair: Dirk Heylen

(1:30) Demos

(2:00) Invited Talk. BCI for healthy users?, *Brendan Allison*

(2:30) Classifying High-Noise EEG in Complex Environments for Brain-Computer Interaction Technologies, *Brent Lance, Stephen Gordon, Jean Vettel, Tony Johnson, Victor Paul, Chris Manteuffel, Matthew Jaswa and Kelvin Oie*

PM Break (3:00 - 3:30)

Session 4: (3:30 - 5:00)

Chair: Brent Lance

(3:30) What You Expect Is What You Get? Potential Use of Contingent Negative Variation in Passive BCI Systems to Enhance Gaze-Based HMI, *Klas Ihme and Thorsten Oliver Zander*

(4:00) Invited Talk. A Commercial Point of View on BCI, *Thomas Sullivan*

(4:45) Closing Discussion

Machine Learning for Affective Computing Workshop (MLAC)

1:30 - 5:30 in Room 227

Chairs: M. Ehsan Hoque, Dan McDuff, Louis-Philippe Morency, Rosalind Picard

Session 1 (1:30 - 3:00)

Chair: Louis-Philippe Morency

(1:30) Invited Speaker. Human-Centric Machine Learning, *Ashish Kapoor*

(2:15) A Spatio-Temporal Probabilistic Framework for Dividing and Predicting Facial Action Units, *A K M Mahbubur Rahman, Md. Iftekhar Tanveer and Mohammed Yeasin*

(2:35) Large Scale Personality Classification of Blogger, *Francisco Iacobelli, Alastair Gill, Scott Nowson and Jon Oberlander*

PM Break (3:00 - 3:30)

Session 2 (3:30 - 5:30)

Chair: M. Ehsan Hoque

(3:30) Smartphones get Emotional: Mind reading Images and Reconstructing the Neural Sources, *Michael Kai Petersen, Carsten Stahlhut, Arkadiusz Stopczynski, Jakob Eg Larsen and Lars Kai Hansen*

(3:50) Generalizing Models of Student Affect in Game-Based Learning Environments, *Jennifer Sabourin, Bradford Mott and James Lester*

(4:10) Invited Speaker. Machine Learning for Affective Computing: Findings and Issues, *Jeffrey Cohn*

(5:00) Panel and Discussion

Monday, Oct 10

Registration (all day)

8:00 - 5:00 in the Lobby

Opening Session

8:45 - 9:00 in the Zone

Chairs: Sidney D'Mello and Art Graesser

Keynote: Measuring Affect in the Wild, Rosalind Picard, MIT

9:00 - 10:00 in the Zone

Chair: Art Graesser

Abstract. Our teams at MIT and at Affectiva have invented mobile sensors and software that can help sense autonomic stress and activity levels comfortably while you are on the go, e.g. the Affectiva Q™ Sensor for capturing sympathetic nervous system activation, or without distracting you while you are online, e.g. webcam-based software capturing heart rate variability and facial expressions. We are also developing new technologies that capture and respond to negative and positive thoughts, combining artificial intelligence and crowd-sourced online human computation to provide just-in-time emotional support through a mobile phone with texting. Our technologies are all opt-in, and are currently being used robustly for “outside the lab, mobile” studies where core emotional processes are involved in autism, PTSD, sleep disorders, eating disorders, substance abuse, epilepsy, stressful workplaces and learning environments, online customer experiences, and more. The new technologies enable collecting orders of magnitude more data than previous lab-based studies, containing many fascinating variations of “what people really do” especially when making expressions such as smiles. This talk will highlight some of the most interesting findings from recent work together with stories of personal adventures in emotion measurement out in the wild.

AM Break

10:00 - 10:30 in the Lobby

Best Paper Nominees Session

10:30 - 12:00 in the Zone

Chair: Sidney D'Mello

(10:30) EmotionML -- An Upcoming Standard for Representing Emotions and Related States. *Marc Schroeder, Paolo Baggia, Felix Burkhardt, Catherine Pelachaud, Christian Peter, and Enrico Zovato*

(10:53) Persuasive Language and Virality in Social Networks. *Carlo Strapparava, Marco Guerini and Gozde Ozbal*

(11:15) Toward a Computational Framework of Suspense and Dramatic Arc. *Brian O'Neill and Mark Riedl*

(11:38) Emotion-based Intrinsic Motivation for Learning Agents. *Pedro Sequeira, Francisco Melo and Ana Paiva*

Lunch

12:00 - 1:00 in the Lobby

Session 1: Affect Detection from Speech and Text

1:00 - 2:30 in the Zone

Chair: Carlo Strapparava

(1:00) Investigating the Prosody and Voice quality of Social Signals in Scenario Meetings. *Marcela Charfulan and Marc Schröder*

Session 2: Computational Modeling of Affect

1:00 - 2:30 in Methodist Presentation Theatre

Chair: Kostas Karpouzis

(1:00) A Generic Emotional Contagion Computational Model. *Gonçalo Pereira, Joana Dimas, Rui Prada, Ana Paiva and Pedro Santos*

Monday, Oct 10

(1:23) Multiple Instance Learning for Classification of Human Behavior Observations. *Athanasios Katsamanis, James Gibson, Matt Black and Shrikanth Narayanan*

(1:45) A Phonetic Analysis of Natural Laughter, for Use in Automatic Laughter Processing Systems. *Jerome Urbain and Thierry Dutoit*

(2:08) Emotional Aware Clustering on Micro-Blogging Sources. *Katerina Tsagkalidou, Vassiliki Koutsonikola, Athena Vakali and Konstantinos Kafetsios*

(1:23) Agents with Emotional Intelligence for Storytelling. *João Dias and Ana Paiva*

(1:45) A Computer Model of the Interpersonal Effect of Emotion Displayed in a Social Dilemma. *Celso De Melo, Peter Carnevale, Dimitrios Antos and Jonathan Gratch*

(2:08) Are You Friendly or just Polite? – Analysis of smiles in spontaneous face-to-face interactions. *Mohammed Hoque, Louis-Philippe Morency and Rosalind Picard*

PM Break

2:30 - 3:00 in the Lobby

Session 3: Affect Detection from Posture & Gesture

3:00 - 4:30 in the Zone

Chair: Nadia Berthouze

(3:00) Mood Recognition Based on Upper Body Posture and Movement Features. *Michelle Thrasher, Marjolein Van Der Zwaag, Nadia Berthouze and Joyce Westerink*

(3:23) Multi-score Learning for Affect Recognition: the Case of Body Postures. *Hongying Meng, Andrea Kleinsmith and Nadia Bianchi-Berthouze*

(3:45) Evaluating the Communication of Emotion via Expressive Gesture Copying Behaviour in an Embodied Humanoid Agent. *Maurizio Mancini, Ginevra Castellano, Christopher Peters and Peter W. McOwan*

(4:08) Form as a Cue in the Automatic Recognition of Non-Acted Affective Body Expressions. *Andrea Kleinsmith and Nadia Bianchi-Berthouze*

Session 4: Affect Measurement and Annotation

3:00 - 4:30 in Methodist Presentation Theatre

Chair: Ryan Baker

(3:00) FAST-FACS: A Computer-Assisted System to Increase Speed and Reliability of Manual FACS Coding. *Fernando De La Torre, Tomas Simon, Zara Ambadar, and Jeff Cohn*

(3:23) Guess What? A Game for Affective Annotation of Video Using Crowd Sourcing. *Laurel D. Riek, Maria O'Connor, and Peter Robinson*

(3:45) Rating vs. Preference: A comparative study of self-reporting. *Georgios N. Yannakakis and John Hallam*

(4:08) ikannotate - A Tool for Labelling, Transcription, and Annotation of Emotionally Coloured Speech. *Ronald Böck, Ingo Siegert, Matthias Haase, Julia Lange and Andreas Wendemuth*

Reception and Poster Session 1

4:30 - 6:30 in the Lobby

Towards a generic framework for automatic measurements of web usability using affective computing techniques, *Payam Aghaei Pour and Rafael A. Calvo*

Simulating Affective Behaviours: an Approach Based on the COR Theory, *Sabrina Campano, Etienne De Sevin, Vincent Corruble and Nicolas Sabouret*

Emotional Investment in Naturalistic Data Collection, *Ian Davies and Peter Robinson*

When Do We Smile? Analysis and Modeling of the Nonverbal Context of Listener Smiles in Conversation, *Iwan De Kok and Dirk Heylen*

Emotional Cognitive Architectures, *Usef Faghihi, Pierre Poirier and Othalia Larue*

Kalman Filter-Based Facial Emotional Expression Recognition, *Ping Fan, Isabel Gonzalez, Valentin Enescu, Hichem Sabli and Dongmei Jiang*

Monday, Oct 10

SARA: Social Affective Relationship Agent: A Study on the Role of Empathy on Artificial Social Agents, *Sandra Gama, Gabriel Barata, Daniel Gonçalves, Rui Prada and Ana Paiva*

Learning General Preference Models from Physiological Responses in Video Games: How Complex is it? *Maurizio Garbarino, Simone Tognetti, Andrea Bonarini and Matteo Matteucci*

Towards Real-time Affect Detection based on Sample Entropy Analysis of Expressive Gesture, *Donald Glowinski and Maurizio Mancini*

Predicting Learner Engagement during Well-defined and Ill-defined Computer-Based Intercultural Interactions, *Benjamin Goldberg, Robert Sottolare, Keith Brawner and Heather Holden*

Context-Independent Facial Action Unit Recognition using Shape and Gabor Phase Information, *Isabel Gonzalez, Hichem Sahli, Valentin Enescu and Werner Verhelst*

Conveying Emotion with Moving Images: relationship between movement and emotion, *Rumi Hiraga and Keitaro Takahashi*

Hybrid Fusion Approach for Detecting Affects from Multichannel Physiology, *Md. Sazzad Hussain, Rafael A. Calvo and Payam Aghaei Pour*

Investigating the Suitability of Social Robots for the Wellbeing of the Elderly, *Suzanne Hutson, Soo Ling Lim, Peter Bentley, Nadia Bianchi-Berthouze and Ann Bowling*

The Effects of Emotionally Worded Synthesized Speech on the Ratings of Emotions and Voice Quality, *Mirja Ilves, Veikko Surakka and Toni Vanhala*

Evaluating a Cognitive-Based Affective Student Model, *Patricia Jaques, Rosa Vicari, Sylvie Pesty and Jean-Claude Martin*

Audio Visual Emotion Recognition Based on Triple-Stream Dynamic Bayesian Network Models, *Dongmei Jiang, Yulu Cui, Xiaojing Zhang, Ping Fan, Isabel Ganzalez and Hichem Sahli*

Emotion Twenty Questions: Toward a Crowd-Sourced Theory of Emotions, *Abe Kazemzadeh, Sungbok Lee, Panayiotis Georgiou and Shrikanth Narayanan*

A Pattern-based Model for Generating Text to Express Emotion, *Fazel Keshtkar and Diana Inkpen*

Tuesday, Oct 11

Registration (all day)

8:00 - 5:00 in the Lobby

To our Emotions, with Love: How Affective should Affective Computing be?, *Arvid Kappas, Jacobs U. Bremen*

9:00 - 10:00 in The Zone

Chair: Jonathan Gratch

Abstract. I will discuss how much emotion might or might not be needed when trying to build emotional or emotion-savvy systems, depending on the type of application that is desired, based on a multi-level approach. At one level of analysis, a clear distinction of encoding and decoding processes is required to know what (real) people actually show in certain situations, or what people might in fact perceive. It is not obvious how much information is actually “read” from faces, as opposed to “read” into faces. In other words, context plays a large role for the interpretation of nonverbal behavior. Some of this context is verbal, but some is situational and social.

At a different level of analysis, interactive characteristics need to be considered. This refers to issues such as responsiveness, synchrony, or imitation that are often neglected in affective computing applications and in basic psychological research. Artificial systems that only react to observed patterns of verbal/nonverbal behavior might be too slow and create strange delayed effects – anticipation might be a key element here. It is these areas where much interesting work is, should be, and will be happening in the next few years.

Tuesday, Oct 11

AM Break

10:00 - 10:30 in the Lobby

Doctoral Consortium 1: Emotion Expression

10:30 - 12:00 in the Zone

Chair: Jean-Claude Martin

(10:30) An Android Head for Social Emotional Intervention for Children with Autism Spectrum Conditions, *Andra Adams and Peter Robinson*

(10:48) Expressive Gesture Model for Humanoid Robot, *Quoc Anh Le and Catherine Pelachaud*

(11:06) ***Using Facial Emotional Signals for Communication between Emotionally Expressive Avatars in Virtual Worlds, *Yuqiong Wang and Joe Geigel*

(11:24) Candidacy of Physiological Measurements for Implicit Control of Emotional Speech Synthesis, *Shannon Hennig*

(11:42) Toward a Computational Model of Affective Responses to Stories for Augmenting Narrative Generation, *Brian O'Neill*

Doctoral Consortium 2: Emotion Recognition

10:30 - 12:00 in Methodist Theatre

Chair: Kostas Karpouzis

(10:30) Recognizing bodily expression of affect in user tests, *Marco Pasch and Monica Landoni*

(10:48) Emotion Recognition using Hidden Markov Models from Facial Temperature Sequence, *Zhilei Liu and Shangfei Wang*

(11:06) Automatic Emotion Recognition from Speech, *Yazid Attabi and Pierre Dumouchel*

(11:24) Multimodal Affect Recognition in Intelligent Tutoring Systems, *Ntombikayise Banda and Peter Robinson*

(11:42) Interpreting hand-over-face gestures, *Marwa Mahmoud and Peter Robinson*

Doctoral Consortium 3: Models, Architectures and Applications

10:30 - 12:00 in Room 405

Chair: Ana Paiva

(10:30) ***Toward a Computational Approach For Natural Language Description of Emotions, *Abe Kazemzadeh*

(10:48) An Integrative Computational Model of Emotions, *Luis-Felipe Rodríguez, Félix Ramos and Gregorio García*

(11:06) Emotion Generation Integration into Cognitive Architecture, *Jerry Lin*

(11:24) Affective Support in Narrative-Centered Learning Environments, *Jennifer Sabourin*

(11:42) ***Automatic Understanding of Affective and Social Signals by Multimodal Mimicry Recognition, *Xiaofan Sun, Anton Nijholt, Maja Pantic and Khiet Truong*

*** Paper is nominated for the Prof Fiorella de Rosis award for best DC paper.

Lunch

12:00 - 1:00 in the Lobby

Session 5: Affect Detection from Physiology

1:00 - 2:30 in the Zone

Chair: Peter Robinson

(1:00) Call Center Stress Recognition with Person-Specific Models. *Javier Hernandez, Rob Morris and Rosalind Picard*

(1:23) Generic Physiological Features as Predictors of Player Experience. *Hector Perez Martinez, Maurizio Garbarino and Georgios N. Yannakakis*

(1:45) Recording Affect in the Field: Towards Methods and Metrics for Improving Ground Truth Labels. *Jennifer Healey*

Session 6: Affect and Learning

1:00 - 2:30 in Methodist Presentation Theatre

Chair: Art Graesser

(1:00) The Dynamics Between Student Affect and Behavior Occurring outside of Educational Software. *Ryan Baker, Gregory Moore, Angela Wagner, Jessica Kalka, Aatish Salvi, Michael Karabinos, Colin Ashe and David Yaron*

(1:23) Exploring the Relationship Between Novice Programmer Confusion and Achievement. *Diane Marie Lee, Ma. Mercedes Rodrigo, Ryan Baker, Jessica Sugay and Andrei Coronel*

Tuesday, Oct 11

(2:08) Affective Modeling from Multichannel Physiology: Analysis of Day Differences. *Omar Alzoubi, Md. Sazzad Hussain, Sidney D'Mello and Rafael Calvo*

(1:45) Modeling Learner Affect with Theoretically Grounded Dynamic Bayesian Networks. *Jennifer Sabourin, Bradford Mott and James Lester*

(2:08) The Relationship between Carelessness and Affect in a Cognitive Tutor. *Maria Ofelia Clarissa San Pedro, Ma. Mercedes Rodrigo and Ryan Baker*

Session 7: Affective Databases and Representation

2:30 - 3:15 in the Zone

Chair: Rafael Calvo

(2:30) 3D Corpus of Spontaneous Complex Mental States. *Marwa Mahmoud, Tadas Baltrušaitis, Peter Robinson, and Laurel D. Riek*

(2:53) A Multimodal Database for Mimicry Analysis. *Xiaofang Sun, Jeroen Lichtenauer, Michel Valstar, Anton Nijholt, and Maja Pantic*

Session 8: Affective Agents and Applications

2:30 - 3:15 in Methodist Presentation Theatre

Chair: Georgios Yannakakis

(2:30) Using Individual Light Rigs to Control the Perception of a Virtual Character's Personality. *Alexis Heloir, Kerstin Kipp, and Michael Kipp*

(2:53) Being Happy, Healthy and Whole Watching Movies that Affect our Emotions. *Teresa Chambel, Eva Oliveira, and Pedro Martins*

PM Break, Interactive Events, and Poster Session 2

3:15 - 5:00 in the Lobby

Interactive Events

Building Rapport with a 3D Conversational Agent, *Whitney Cade, Andrew Olney, Patrick Hays and Julia Lovel*

Siento: An Experimental Platform for Behavior and Psychophysiology in HCI, *Rafael A. Calvo, Sazzad Hussain, Payam Aghaei Pour and Omar Alzoubi*

A Gesture-based Interface and Active Cinema, *Mark Chavez and Aung Sithu Kyaw*

OperationARIES!: Aliens, Spies and Research Methods, *Carol Forsyth, Art Graesser, Keith Millis, Zhiqiang Cai and Diane Halpern*

EMO20Q Questioner Agent, *Abe Kazemzadeh, James Gibson, Panayiotis Georgiou, Sungbok Lee and Shrikanth Narayanan*

Posters

Interpretations of Artificial Subtle Expressions (ASEs) in Terms of Different Types of Artifact: A Comparison of An On-screen Artifact with A Robot, *Takanori Komatsu, Seiji Yamada, Kazuki Kobayashi, Kotaro Funakoshi and Mikio Nakano*

Design of a Virtual Reality based Adaptive Response Technology for Children with Autism Spectrum Disorder, *Uttama Lahiri, Esubalew Bekele, Elizabeth Dohrmann, Zachary Warren and Nilanjan Sarkar*

A Game Prototype with Emotional Contagion, *Gonçalo Pereira, Joana Dimas, Rui Prada, Pedro A. Santos and Ana Paiva*

A Smartphone Interface for a Wireless EEG Headset with Real-time 3D Reconstruction, *Arkadiusz Stopczynski, Jakob Eg Larsen, Carsten Stahlhut, Michael Kai Petersen and Lars Kai Hansen*

Prediction of Affective States through Non-invasive Thermal Camera and EMG Recordings, *Didem Gokcay, Serdar Baltaci, Cagri Karahan and Kemal Dogus Turkey*

Affective State Recognition in Married Couples' Interactions Using PCA-based Vocal Entrainment Measures with Multiple Instance Learning, *Chi-Chun Lee, Athanasios Katsamanis, Matthew P. Black, Brian R. Baucom, Panayiotis G. Georgiou and Shrikanth S. Narayanan*

A Comparison of Unsupervised Methods to Associate Colors with Words, *Gözde Özbal, Carlo Strapparava, Rada Mihalcea and Daniele Pighin*

Tuesday, Oct 11

Computer Based Video and Virtual Environments in the Study of the Role of Emotions in Moral Behavior, *Xueni Pan, Domna Banakou and Mel Slater*

EmoWisconsin: An emotional children speech database in Mexican Spanish, *Humberto Pérez-Espinosa, Carlos Alberto Reyes-García and Luis Villaseñor-Pineda*

“Should I Teach or Should I Learn?” - Group Learning Based on the Influence of Mood, *César Pimentel*

How Low Level Observations can Help to Reveal the User’s State in HCI, *Stefan Scherer, Martin Schels and Günther Palm*

Investigating Acoustic Cues in Automatic Detection of Learners’ Emotion from Auto Tutor, *Rui Sun and Elliot Ii Moore*

The Affective Triad: Stimuli, Questionnaires and Measurements, *Simone Tognetti, Maurizio Garbarino, Matteo Matteucci and Andrea Bonarini*

Relevance Vector Machine based Speech Emotion

Recognition, *Fengna Wang, Werner Verhelst and Hichem Sabli*

A Regression Approach to Affective Rating of Chinese Words from ANEW, *Wen-Li Wei, Chung-Hsien Wu and Jen-Chun Lin*

Active Class Selection for Arousal Classification, *Dongrui Wu and Thomas Parsons*

Inductive Transfer Learning for Handling Individual Differences in Affective Computing, *Dongrui Wu and Thomas Parsons*

The Machine Knows What You Are Hiding: An Automatic Micro-Expression Recognition System, *Qi Wu, Xunbing Shen and Xiaolan Fu*

EMOGIB: Emotional Gibberish Speech Database for Affective Human-Robot Interaction, *Selma Yilmazyildiz, David Henderickx, Bram Vanderborght, Werner Verhelst, Eric Soetens and Dirk Lefebber*

Context-sensitive Affect Sensing and Metaphor Identification in Virtual Drama, *Li Zhang*

Business Meeting

5:00 - 6:00 in Methodist Presentation Theatre

Banquet

6:30 - 9:30 at the Peabody

Buses leave from the FedEx building between 6:00 and 6:15 pm

Wednesday, Oct 12

Registration

8:00 - 12:00 in the Lobby

Keynote: Affect, Learning, and Delight, James Lester, North Carolina State University

9:00 - 10:00 in the Zone

Chair: Rafael Calvo

Abstract. Because of the growing recognition of the role that affect plays in learning, affective computing has become the subject of increasing attention in research on interactive learning environments. The intelligent tutoring systems community has begun actively exploring computational models of affect, and game-based learning environments present a significant opportunity for investigating student affect in interactive learning. One family of game-based learning environments, narrative-centered learning environments, offer a particularly compelling laboratory for investigating student affect. In narrative-centered environments, learning activities play out in dynamically generated interactive narratives and training scenarios. These afford significant opportunities for investigating computational models of student emotion. In this talk, we explore the role that affective computing can play in next-generation interactive learning environments, with a particular focus on affect recognition, affect understanding, and affect synthesis in game-based learning.

Wednesday, Oct 12

AM Break

10:00 - 10:30 in the Lobby

Panel Session: The Present and Future of Affective Computing: Where are we and where do we go from here?

10:30 - 12:00 in the Zone

Panelists: Jeff Cohn, Jonathan Gratch, Arvid Kappas, James Lester, Ana Paiva, Catherine Pelachaud

Chair: Sidney D'Mello

Lunch

12:00 - 1:00 in the Lobby

Session 9: Varied Approaches to Affect Detection

1:00 - 2:30 in the Zone

Chair: Björn Schuller

(1:00) Unsupervised Temporal Segmentation of Talking Faces using Visual Cues to Improve Emotion Recognition. *Sudha Velusamy, Viswanath Gopalakrishnan, Bilva Navathe, Hariprasad Kannan, Balasubramanian Anand and Anshul Sharma*

(1:23) Multi-modal Affect Induction for Affective Brain-Computer Interfaces. *Christian Muehl, Egon Van Den Broek, Anne-Marie Brouwer, Femke Nijboer, Nelleke Van Wouwe and Dirk Heylen*

(1:45) Semi-Coupled Hidden Markov Model with State-Based Alignment Strategy for Audio-Visual Emotion Recognition. *Jen-Chun Lin, Chung-Hsien Wu and Wen-Li Wei*

(2:08) Associating Textual features with Visual Ones to Improve Affective Image Classification. *Ningning Liu, Emmanuel Dellandréa, Bruno Tellez and Liming Chen*

Session 10: The Experience and Expression of Affect

1:00 - 2:30 in Methodist Presentation Theatre

Chair: Anton Nijholt

(1:00) Predicting Facial Indicators of Confusion with Hidden Markov Models. *Joseph Grafsgaard, Kristy Elizabeth Boyer and James Lester*

(1:23) The Impact of Music on Affect during Anger Inducing Drives. *Marjolein Van Der Zwaag, Stephen Fairclough, Elena Spiridon and Joyce Westerink*

(1:45) The Affective Experience of Handling Digital Fabrics: Tactile and Visual Cross-modal Effects. *Di Wu, Ting-I Wu, Harsimrat Singh, Stefano Padilla, Douglas Atkinson, Nadia Bianchi-Berthouze, Mike Chantler and Sharon Baurley*

(2:08) Evaluations of Piezo Actuated Haptic Stimulations. *Katri Salminen, Veikko Surakka, Jani Lylykangas, Jussi Rantala, Pauli Laitinen and Roope Raisamo*

PM Break

2:30 - 2:45 in the Lobby

Session 11: Affect Dialogue Systems

2:45 - 3:55 in the Zone

Chair: Marc Schröder

(2:45) "That's Aggravating, very Aggravating": Is it Possible to Classify Behaviors in Couple Interactions using Automatically derived Lexical Features? *Panayiotis G. Georgiou, Matthew P. Black, Adam C. Lammert, Brian R. Baucom and Shrikanth S. Narayanan*

(3:08) The Good, the Bad and the Neutral: Affective Profile in Dialog System-User Communication. *Marcin Skowron, Stefan Rank, Mathias Theunis and Julian Sienkiewicz*

(3:31) Effect of Affective Profile on Communication Patterns and Affective Expressions in Interactions with a Dialog System. *Marcin Skowron, Mathias Theunis, Stefan Rank and Anna Borowiec*

End of conference

