

**AHFE**  
International

Applied  
Human Factors  
and Ergonomics  
Conference

**2010**

www.ahfe2010.org

# 2010

ADVANCE PROGRAM & CALL FOR PARTICIPATION

# AHFE

# International

## 3<sup>rd</sup> International Conference on Applied Human Factors and Ergonomics (AHFE)

jointly with

1<sup>st</sup> International Conference on Human Factors and Ergonomics in Healthcare

1<sup>st</sup> International Conference on Cross-Cultural Decision Making

1<sup>st</sup> International Conference on Neuroergonomics

1<sup>st</sup> International Conference on Applied Digital Human Modeling  
and

13<sup>th</sup> International Conference on Human Aspects of Advanced Manufacturing  
(HAAMAHA)

**17-20 July 2010**  
**Intercontinental • Miami, Florida USA**

Under the auspices of 11 distinguished  
international Boards of 274 members from 44 countries

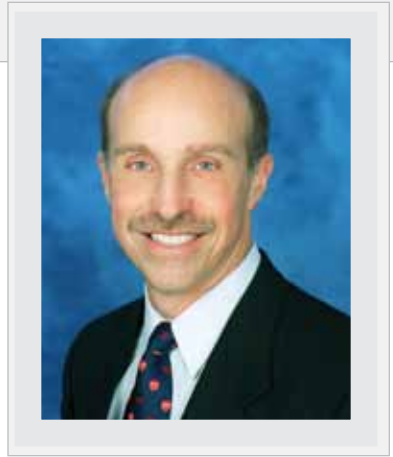
[www.ahfe2010.org](http://www.ahfe2010.org)

# Opening Plenary Session and Keynote Address

Saturday, July 17, 2010 • 17:30 - 18:45

## HEALTHCARE AND PATIENT SAFETY: THE FAILURE OF TRADITIONAL APPROACHES – HOW HUMAN FACTORS AND ERGONOMICS CAN AND MUST HELP

**James Bagian,  
U.S. Department of Veterans Affairs, USA**



### **Short biography:**

James Bagian, a veteran NASA astronaut, is the Chief Patient Safety Officer and the Director and Founder of the National Center for Patient Safety at the U.S. Department of Veterans Affairs. Jim has been responsible for the design, development, and deployment of numerous tools and methods to improve patient safety that are routinely used on an international basis. He has also been the recipient of numerous awards and is a member of both the National Academy of Engineering and the Institute of Medicine.

### **Summary:**

Hazard and harm to patients as well as inefficiencies associated with healthcare have been well described as world-wide problems that result in hundreds of thousands of patient deaths and billions of dollars of waste every year. The underlying causes for these problems have not been nearly so well described; more importantly, generalizable mitigation strategies have not been effectively identified or employed. The current state of healthcare and patient safety will be discussed with particular attention to the essential role that an engineering based approach, which is heavily rooted in human factors and ergonomics, must play if real and sustainable progress in the safe and efficient delivery of healthcare is to be achieved. Specific case studies that illustrate the compelling opportunities for the application of human factors and ergonomics related knowledge will be discussed.

# Overview

## Areas of Interest

You are cordially invited to participate in the 3rd Applied Human Factors and Ergonomics (AHFE) International Conference 2010 and the affiliated 1st International Conference on Human Factors and Ergonomics in Healthcare, 1st International Conference on Cross-Cultural Decision Making, 1st International Conference on Neuroergonomics, 1st International Conference on Applied Digital Human Modeling and the 13th International Conference on Human Aspects of Advanced Manufacturing, which are jointly held under one management and one registration.

The conference objective is to provide an international forum for the dissemination and exchange of scientific information on theoretical, generic, and applied areas of ergonomics, including, physical ergonomics, cognitive ergonomics, social and organizational ergonomics, ergonomics modeling and usability evaluation, healthcare and special populations, safety and ergonomics in manufacturing. This will be accomplished through the following six modes of communication: keynote presentation, parallel sessions, demonstration and poster sessions, tutorials, exhibitions and meetings of special interest groups. The four-day conference will start with tutorials. The tutorials will be held on July 17, 2010. Tutorials will be offered (both half-day and full-day) at introductory, intermediate, and advanced levels covering the entire spectrum of the conference.

**CONFERENCE RECEPTION, SATURDAY, JULY 17, 2010 • 19:00**

# Call for Posters

## /Demonstrations

**PROPOSALS FOR POSTERS OR DEMONSTRATIONS  
MAY BE SUBMITTED UNTIL MAY 15, 2010**

**Posters and demonstration sessions** are designed to accommodate the presentation of late-breaking scientific and professional news, work in progress, and work which can be more effectively presented via demonstration or when the author feels more comfortable presenting the material in written form or demonstrating it rather than by oral presentation. An abstract of 300 words should be submitted through the web and should include the essence of the planned poster or demonstration. All proposals will be peer-reviewed within fifteen days of submission. Equipment needed for demonstration is the responsibility of the author.

## CONFERENCE BOOKS

Presented papers will be included as chapters in a series of 8 books to be published by Taylor and Francis. Each book will cover a specific subject area and will have an editor (editors). In addition, each of the 8 books will have a distinct title and will be marketed by Taylor and Francis Ltd. worldwide.

## PRE-CONFERENCE TUTORIALS

ALL TUTORIALS WILL BE HELD ON JULY 17, 2010

8:00 - 17:00

**Tutorial 1:** Practical Statistical Methods for Usability Testing

**Presenters:** James R. Lewis, IBM Software Group, USA and Jeff Sauro, Oracle, USA

8:00 - 12:00

**Tutorial 2:** Cross-Cultural User-Experience Design

**Presenter:** Aaron Marcus, Aaron Marcus and Associates, Inc., USA

**Tutorial 3:** Selling Human Factors and Ergonomics in a Successful Way: Creating Enthusiasm for Ergonomics

**Presenter:** Peter Vink, TNO and Delft University of Technology, The Netherlands

**Tutorial 4:** Neuroergonomics Theory and Methods: Neural, Computational, and Genetic

**Presenters:** Raja Parasuraman, George Mason University, USA and Glenn Wilson, Physiometrex, Inc., USA

13:00 - 17:00

**Tutorial 5:** Human Factors and Ergonomics in Healthcare

**Presenter:** Vince Duffy, Purdue University, USA

**Tutorial 6:** Mobile Human-Computer Interface Design

**Presenter:** Aaron Marcus, Aaron Marcus and Associates, Inc., USA

**Tutorial 7:** Interaction Design of Highly Automated Domain-Specific Systems

**Presenters:** Guy A. Boy, Florida Institute of Technology and Institute for Human and Machine Cognition, USA and Jeffrey M. Bradshaw, Institute for Human and Machine Cognition, USA

**Tutorial 8:** Application of Systemic-Structural Activity Theory to the Analysis of Cognitive and Physical Tasks

**Presenters:** Gregory Bedny and Inna Bedny, Ergologic, USA

# Tutorial 1

July 17, 2010 • Full day / 8:00 - 17:00

## PRACTICAL STATISTICAL METHODS FOR USABILITY TESTING

James R. Lewis, IBM Software Group, USA  
Jeff Sauro, Oracle, USA

### Description:

The objective of this tutorial is to cover basic statistical methods (some classical, others new) that are of value to usability practitioners because they provide a principled approach to answering three fundamental questions associated with usability testing: (1) was the goal of testing met? (2) is there a statistically significant difference?, and (3) how many participants are needed? Attendees will benefit by learning these basic statistical methods and practicing their application to real usability data, gaining the skill to apply the methods to their own data. The target audience includes a broad range of usability practitioners, from novice to expert. The content of the course provides a quick refresh of basic statistical principles, covers the major types of quantitative questions that usability practitioners encounter in the performance of their duties, and draws upon recent statistical research conducted by the instructors to guide statistical practice in usability engineering – information that is available in the peer-reviewed published literature, but is not yet available in any textbook. The audience we are trying to reach are those usability practitioners who are working with or plan to work with quantitative data and have questions about current leading practices.

**James R. Lewis** graduated with an M.A. in Engineering Psychology from New Mexico State University (1982), a Ph.D. in Psycholinguistics from Florida Atlantic University (1996), and has worked at IBM since 1981, where he holds 70 patents. Jim has published research on the measurement of usability satisfaction, use of confidence intervals, and sample size estimation for usability studies. He serves on the editorial boards of the International Journal of Human-Computer Interaction and the Journal of Usability Studies, chaired a formative usability metrics workgroup for NIST, and wrote the chapter on usability testing for the Handbook of Human Factors and Ergonomics (2006).

**Jeff Sauro** works as a human factors engineer for Oracle, is a Six Sigma Black Belt, and is the webmaster of [measuringusability.com](http://measuringusability.com). Jeff has published and presented on the topic of quantitative methods and statistical analysis of usability data at conferences such as UPA, CHI, HFES, and HCI. He was recently the guest editor for a special issue of Interactions Magazine dedicated to Quantifying Usability.

# Tutorial 2

July 17, 2010 • Half day / 8:00 - 12:00

## CROSS-CULTURAL USER-EXPERIENCE DESIGN

Aaron Marcus,  
Aaron Marcus and Associates, Inc., USA

### Description:

Human-computer interfaces (HCIs) for desktop, Web, mobile, and vehicle platforms reach across culturally diverse user communities, sometimes within a single country/language group, and certainly across the globe. If HCIs are to be usable, useful, and appealing to such a wide range of users, HCI/user-interface/user-experience developers must account for cultural preferences in globalizing/localizing products and services. In this tutorial, participants will learn about culture, culture models, practical principles, and effective techniques that are immediately useful in terms of both analysis and design tasks. Human-factors and ergonomics professionals who may have some experience with HCI but may be new to globalization/localization and especially to cross-cultural product/service development is the target audience.

**Aaron Marcus** is a world-renown pioneer of computer graphics and HCI. He designed his first HCI in 1967 for the Picturephone at AT+T Bell Labs. He taught at Princeton, Yale, Hebrew University/Jerusalem, University of California/Berkeley, and Institute of Design/IIT/Chicago. He was a Staff Scientist at Lawrence Berkeley Lab, wrote/co-wrote six books and more than 250 publications, was named an AIGA Fellow, was elected to the CHI Academy, and received the Industry Achievement Award from the NCGA. He founded AM+A in 1982, one of the oldest independent HCI full-service companies. He has lectured and tutored internationally for 30 years.

# Tutorial 3

July 17, 2010 • Half day / 8:00 - 12:00

## SELLING HUMAN FACTORS AND ERGONOMICS IN A SUCCESSFUL WAY: CREATING ENTHUSIASM FOR ERGONOMICS

**Peter Vink**, TNO and Delft University of Technology, The Netherlands

### Description:

Ergonomics is fun for you and your clients. Of course, it's not easy to develop ergonomic solutions that are really implemented and used, but it is possible. In this tutorial the most crucial elements of a successful approach will be trained and also the mistakes in the projects of Peter Vink will be shared with the participants. Ergonomists will learn how to enjoy and celebrate ergonomics. They will experience ways of doing tests and evaluations that can block the implementation and ways that can improve the chance of successful implementation. Test/evaluations concern measuring posture, work paces, usability, experienced workload, comfort with questionnaires etc. Cases from office work and assembly work will be used to experience the differences. A prerequisite is that participants have some experience in participatory ergonomics or at least some experience in improving work. No special material except pencil and paper will be needed.

**Peter Vink** is the Head of the Department of Environmental Design at TNO and Professor at Delft University of Technology, Faculty of Industrial Design Engineering. He has written more than 200 papers on participatory design.

# Tutorial 4

July 17, 2010 • Half day / 8:00 - 12:00

## NEUROERGONOMICS THEORY AND METHODS: NEURAL, COMPUTATIONAL, AND GENETIC

**Raja Parasuraman**, George Mason University, USA  
**Glenn Wilson**, Physiometrex, Inc., USA

### Description:

The goal of this tutorial is to outline the major theoretical frameworks of neuroergonomics and to provide attendees with a detailed understanding of neuroergonomics methods and tools. The target audience will range from researchers and practitioners in human factors with no experience in the use of neuroergonomic tools who wish to learn how to use them, to those who have used such methods previously in research and development efforts, but who wish to keep in touch with the latest, state-of-the-art methods and issues. We will focus on three major categories of methods: neural, computational, and genetic. (1) Under neural methods, we will provide a framework that characterizes the merits and disadvantages of neuroimaging methods (fMRI, EEG, ERPs, fNIRS, TCD, etc.) in terms of several criteria such as spatial resolution, temporal resolution, portability, cost, user acceptance, etc. A live demonstration of a portable, dry electrode EEG system and eye and heart data collection with "wet" electrodes will take up part of the tutorial. (2) Under computational methods, we will describe the use of neural network modeling in classification of operator state for possible use in adaptive automation. More broadly, we will describe how neurally-inspired computational models can be used in the assessment of human-machine system performance. (3) Under genetic methods, we will describe candidate-gene and genome-wide association methods for the characterization of individual differences in human performance. Implications for selection, training, and individuation of interfaces will be discussed.

**Raja Parasuraman** is University Professor of Psychology at George Mason University. He is Director of the Graduate Program in Human Factors and Applied Cognition and Chair of the Neuroimaging Core of the Krasnow Institute. He received a Ph.D. in Psychology from Aston University, Birmingham, U.K. He has long-standing research programs in human factors, cognitive neuroscience and molecular genetics of cognition.

**Glenn Wilson** is currently Chief Scientist with Physiometrex. He received a Ph.D. in Psychology from the University of Arizona. He held a post doctoral position at the University of California, Los Angeles. He has participated in and led NATO working groups and lecture series. Glenn is a Fellow of the Human Factors and Ergonomics Society, Aerospace Medical Association and the Aerospace Human Factors Association.

# Tutorial 5

July 17, 2010 • Half day / 13:00 - 17:00

## HUMAN FACTORS AND ERGONOMICS IN HEALTHCARE

**Vince Duffy,**  
Purdue University, USA

### Description:

Recent human factors and ergonomics research in the healthcare area will be the focus of this tutorial. Fundamental principles in human factors and ergonomics will be highlighted considering the physical, cognitive and organizational aspects. With emphasis on patient safety, healthcare information technology implementation, medication impairment and human performance, this tutorial will be accessible to intermediate and advanced participants with interest in developing new research activities in healthcare. The tutorial will be presented through classroom type instruction and powerpoint projection. Selected readings will be made available in advance for those who have pre-registered

**Vincent Duffy** is a faculty member at Purdue University and has held a three year appointment with the Regenstrief Center for Healthcare Engineering. He has a dual appointment in the School of Industrial Engineering and the Department of Agricultural & Biological Engineering with a focus on safety and work design. Professor Duffy is the author of over 100 scientific publications, four edited books and is a Certified Professional Ergonomist.

# Tutorial 6

July 17, 2010 • Half day / 13:00 - 17:00

## MOBILE HUMAN-COMPUTER INTERFACE DESIGN

**Aaron Marcus,**  
Aaron Marcus and Associates, Inc., USA

### Description:

Human-computer interfaces (HCIs) combining computation with communication functions, e.g., phone, video, the Web, music, and video are enabling mobile products/services to penetrate environments for work, play, and on the way. For some users, the mobile device is their primary phone, texting, email, media playing, and information-browsing environment. Consequently, developers must learn techniques to make mobile products/services easier to learn and use, more usable, useful, and appealing to an every wider, more diverse set of users. Users must be able to find, sort, play, and pay. This tutorial surveys current issues and products/services and provides key principles/techniques to make product/services easier to produce, sell, learn, use, and maintain. Human-factors and ergonomics professionals who may have some experience with HCI but may be new to mobile product/service development is the target audience.

**Aaron Marcus**, is a world-renown pioneer of computer graphics and HCI. He designed his first HCI in 1967 for the Picturephone at AT+T Bell Labs. He taught at Princeton, Yale, Hebrew University/Jerusalem, University of California/Berkeley, and Institute of Design/IIT/Chicago. He was a Staff Scientist at Lawrence Berkeley Lab, wrote/co-wrote six books and more than 250 publications, was named an AIGA Fellow, was elected to the CHI Academy, and received the Industry Achievement Award from the NCGA. He founded AM+A in 1982, one of the oldest independent HCI full-service companies. He has lectured and tutored internationally for 30 years.

# Tutorial 7

# Tutorial 8

July 17, 2010 • Half day / 13:00 - 17:00

July 17, 2010 • Half day / 13:00 - 17:00

## INTERACTION DESIGN OF HIGHLY AUTOMATED DOMAIN-SPECIFIC SYSTEMS

Guy A. Boy,

Florida Institute of Technology and Institute for Human and Machine Cognition, USA

Jeffrey M. Bradshaw,

Institute for Human and Machine Cognition, USA

## APPLICATION OF SYSTEMIC-STRUCTURAL ACTIVITY THEORY TO THE ANALYSIS OF COGNITIVE AND PHYSICAL TASKS

Gregory Bedny

Ergologic, Inc., USA

Inna Bedny,

Ergologic, Inc., USA

### Description:

The main learning objectives of this tutorial are to introduce practitioners and researchers to emerging changes in the way people interact with machines, and in particular to the shift from direct manipulation to agent management in life-critical domains such as aviation, space exploration, military, nuclear industry, automobile industry, telecommunications, and medicine. By the end of the tutorial, participants will be able to better understand and more effectively use current concepts in interaction design of highly automated domain-specific systems. The major features of this tutorial are: an introduction to similarities and differences between human-centered and technology-centered approaches to interaction design of highly automated domain-specific systems; a development of the concept of cognitive function as a common entity that is useful for the representation of both human and software agents (i.e., automation); a presentation of the necessary cognitive science knowledge within the scope of the currently emerging industrial agent technology; a presentation of the tradeoffs between direct manipulation and agent management; live and video demonstrations of how agents can be used to facilitate the communication, co-operation and coordination between various activities that include training and operations; and hands-on exercises of cognitive function allocation that help understand how automation can be human-centered developed.

Guy A. Boy is University Professor at the Florida Institute of Technology, and Senior Research Scientist at the Florida Institute for Human and Machine Cognition. He received his Ph.D. in Automation and System Design from the Ecole Nationale Supérieure de l'Aéronautique et de l'Espace (ENSAE) in 1980. His research is in human-centered design of safety-critical dynamic systems. He is an expert consultant at the European Commission for the Information Society Technologies Programme (IST). He is a Member of The French National Academy of Air and Space.

Jeffrey M. Bradshaw is a research scientist at the Institute for Human and Machine Cognition. Previously, he led the intelligent agent technology group at The Boeing Company. He edited books on Knowledge Acquisition as a Modeling Activity (with Ken Ford, Wiley, 1993), Software Agents (AAAI Press/The MIT Press, 1997), Software Agents for the Warfighter (in press), and Handbook of Agent Technology (AAAI Press/The MIT Press).

### Description:

This tutorial introduces participants to the Systemic-Structural Activity Theory (SSAT) that provides a unified framework and a new approach to the study human work. In this workshop SSAT will be discussed as a conceptual approach of task analysis in study manufacturing and HCI tasks. The tutorial will consist of presentations, discussion and small group exercises. Participants will learn basic concepts and principles of SSAT and acquire knowledge and practical skills for applying these concepts to the task analysis in manufacturing and HCI studies. Researchers, usability engineers, ergonomists and psychologists would find the material useful. The tutorial introduces basic principles and concepts of SSAT. Multiple examples of the algorithmic, functional and quantitative task analysis will be presented. Such concepts as human algorithm, deterministic and probabilistic algorithm will be introduced. Basic principles of algorithmic analysis will be considered based on practical examples. New method of eye movement analysis will be shown. Quantitative method of task complexity evaluation will be discussed. Hands on experience in applying the demonstrated approach to the analysis of computer based tasks and manual-based manufacturing operations will be given. Participants will practice discussed above methods performing a number of exercises. By applying these methods to a series of examples, participants will get hands on experience of using SSAT in manufacturing and HCI fields.

Gregory Bedny received his PhD degree in Industrial/Organizational Psychology from Moscow State Pedagogical University and he received his ScD in Experimental Psychology from Russian National Academy of Science. Gregory is a Senior Researcher and Consultant with Ergologic, Inc. He has approximately 100 publications, including journal papers, scholarly monographs and textbooks in the area of applied and organizational psychology, human factors, activity theory, human performance and human-computer interaction. He presently resides in Wayne, New Jersey.

Inna Bedny received her B.A. in computer science and her PhD in psychology from the University of South Ukrainian State University. She has over 20 years of experience in the analysis and design of complex computer systems. Her research interests include reliability and efficiency of human computer interaction.

# Parallel Technical Sessions

Sunday, July 18, 2010

Each technical session typically consists of seven presentations

Please visit the website at [www.ahfe2010.org](http://www.ahfe2010.org) for a detailed listing of all presentations.

Time	#	Title
8:00-10:00	1	Civilizational Change
	2	Ergonomics Hazards and Prevention
	3	Aviation Human Factors
	4	Ergonomics and Material Environment Design
	5	Using VR/AR to Improve Manual Handling: Part I
	6	Guidance on Developing a Human Factors Safety Case: Full Day Workshop
	7	Ergonomics in Academics/Education/Training
	8	Ergonomics in Industrial Quality
	9	Mobility and Human Modeling
	10	Cognitive Ergonomics: I
	11	Human Factors in Manufacturing: I
<b>10:00 - 10:30 Refreshment break</b>		
10:30-12:30	12	Innovations in Healthcare Safety at the VA
	13	Biometric Symbols for International Users
	14	Extracting Understanding from Diverse Data Sources
	15	Ergonomics Modelling of Systems and Products
	16	Special Populations: I
	17	Guidance on Developing a Human Factors Safety Case: Full Day Workshop
	18	Behavior Based Safety
	19	Military Applications of Neuroergonomics
	20	Anthropometry, Scanning and Posture
	21	Simulation and Modeling in Healthcare
	22	Health Care Providers as Consumers
13:30-15:30	23	Tactical Culture Training
	24	Around the Patient Bed
	25	Human Performance: I
	26	Virtual Working Environment
	27	New Ergonomics Research for Accessibility
	28	Guidance on Developing a Human Factors Safety Case: Full Day Workshop
	29	Safety Systems
	30	Informing Computational Neuroergonomics
	31	Novel Digital Human Modelling Systems
	32	Engineering Modeling in Clinical Settings: Part 1
	33	Medical Devices
<b>15:30 - 16:00 Refreshment break</b>		
16:00-18:00	34	Use Cases of Cross Cultural Decision
	35	Ergonomics in Colombia
	36	Systemic-Structural Activity Theory
	37	Using VR/AR to Improve Manual Handling: Part II
	38	Design of Interface for Smart Products
	39	Guidance on Developing a Human Factors Safety Case: Full Day Workshop
	40	Systems Safety: I
	41	Ergonomics Applications in the Workplace
	42	Human Modeling for Real Problem Solving
	43	Quality in Healthcare
	44	Human Computer Interaction in Healthcare Systems

# Parallel Technical Sessions

Monday, July 19, 2010

Each technical session typically consists of seven presentations

Time	#	Title
8:00-10:00	45	Socio-Cultural Models and Decision-Making
	46	Physical Ergonomics
	47	Developing Multimodal Virtual Training Platforms for Perceptual Motor Skills
	48	Ergonomics in Building and Architecture
	49	Comfort: Seating
	50	Ergonomic Expert Systems and Ergonomic Risk Assessment Methods
	51	Human Performance in Safety-Critical Systems
	52	Human Factors in Manufacturing: II
	53	Neuroergonomics in the Air Force
	54	3D Human Body Scan and Body Modeling Session
	55	Patient Safety
<b>10:00 - 10:30 Refreshment break</b>		
10:30-12:30	56	Cultural Models for Decision Making
	57	Impact of Display Design on Human Performance
	58	Cultural Effect on Team Behaviors
	59	Social & Organizational Ergonomics: I
	60	Postural Modeling for Assessing Ergonomic Product Design
	61	Human Factors Military Applications
	62	Organizational Issues in Safety and Performance
	63	Warnings for Consumer Products and Environments
	64	Training for Unmanned Aircraft Systems
	65	DHM in the Bayesian Programming Framework
	66	Human-System Interface
13:30-15:30	67	Cross-Cultural Competence
	68	1st International Symposium in Ergonomics in Design: Product Ergonomics
	69	Comfort: Intelligent Products/The Process/Tools
	70	Application of Cognitive Ergonomics
	71	Design for All
	72	Systems Safety Engineering
	73	Levels of Automation and Task Allocation in Manufacturing
	74	DHM Applications I
	75	Model Validation Methods
	76	Human and Organizational Aspects: Part 1
	77	Patient Handling
<b>15:30 - 16:00 Refreshment break</b>		
16:00-18:00	78	Impact of Culture on Collaboration and Negotiation
	79	Adapting Work Through Designs and Functions
	80	1st International Symposium in Ergonomics in Design: Ergonomics in the Workplace Design
	81	Developing Work in Collaborative Organizations
	82	Prospective Tactile and Haptic Interactions
	83	Design and Research for Special Populations
	84	Warnings as an Issue in Forensic (legal) Investigations
	85	Motion Analysis and Simulation or Comfort/Discomfort
	86	Computational Approaches for DHM
	87	Engineering Modeling in Clinical Settings: II
	88	Safety of Medication Usage

# Parallel Technical Sessions

Tuesday, July 20, 2010

Each technical session typically consists of seven presentations

Time	#	Title
8:00-10:00	89	Applications of Human, Social, Culture Behavioral Modeling Technology
	90	Comfortable Human Requirements
	91	1st International Symposium in Ergonomics in Design: Virtual Reality in Ergonomic Design
	92	Social and Organizational Ergonomics: II
	93	Ergonomics Modeling and Usability Evaluation: I
	94	Aging and Mobility
	95	Comfort, Safety, Quality and Performance
	96	Panel: Physiological and Neurophysiological Measures for Workload
	97	Digital Human Modelling in Usability Engineering
	98	Methodologies and Applications
<b>10:00 - 10:30 Refreshment break</b>		
10:30-12:30	99	Cross Cultural Decision Making: Training
	100	Cognitive Ergonomics: II
	101	Ergonomics Roadmaps for Work and Products Design
	102	Panel: Helping the User Fail
	103	Ergonomics Modeling and Usability Evaluation: II
	104	Occupational Safety and Health Requirements in the European Union
	105	HCI in the Energy Industry
	106	DHM for Product and Equipment Design
	107	DHM Applications II
	108	Human Interface & Healthcare IT
13:30-15:30	109	Hybrid & Multi-Model Computational Techniques
	110	Cognitive Ergonomics: III
	111	Emerging Issues in the Study of Work Teams
	112	Inclusive Design Symposium
	113	Systems Safety: II
	114	Ergonomic Design of Future Production Systems
	115	Neuroergonomic Applications: I
	116	Cognitive and Organizational Aspects
	117	Human and Organizational Aspects: II
	118	Engineering Healthcare Systems
<b>15:30 - 16:00 Refreshment break</b>		
16:00-18:00	119	Sense Making in Other Cultures: Dynamics of Interaction
	120	1st International Symposium in Ergonomics in Design: Environment and Information
	121	Evolute, Human Competence Management
	122	Ergonomics for the People with Disabilities and Occupational Safety
	123	Systems Safety: III
	124	Neuroergonomic Applications: II
	125	Human Factors in Manufacturing: III
	126	E-healthcare: Opportunities and Pitfalls
	127	Patient Safety Due to Usability

# Conference Registration

**All registrations should be made through the website: [www.ahfe2010.org](http://www.ahfe2010.org)**

Conference Registration (USD)		
	Before May 1, 2010	After May 1, 2010
Best Deal: Conference Registration for Board Members, Presenters and Co-Presenters (Note 1)	1145	1275
Best deal: Regular Conference Registration (Note 1)	1245	1375
Full Day Tutorial	595	695
Half Day Tutorial	345	395
Conference Registration for Board Members, Presenters and Co-Presenters	645	695
Regular Conference Registration	745	795
Best deal: A complete set of 8 conference books	500	500
One Conference Book (Note 2)	72	72
Extra reception dinner ticket	80	80

The Conference registration includes:

- Keynote and parallel paper presentations
- Entrance to the exhibition and poster presentations
- Refreshment breaks
- Conference proceedings on DVD
- One ticket for the Reception Dinner

Additional Copy of Conference Proceedings (DVD): \$45 on site (\$85 after conference)

**Note 1.** This package includes conference registration plus one full day or two half-day Tutorials.

**Note 2.** All hard-cover conference books will be published by Taylor & Francis with the average projected size of 700 pages per book.

**All cancellations must be submitted in writing to the Conference Administrator at: [aeiadmin@insightbb.com](mailto:aeiadmin@insightbb.com)**

For written cancellations received on or before 14 March, 2010, 90% of the registration cost will be refunded (including conference registration, tutorial fees, and reception dinner). 50% of the registration cost will be refunded if a written cancellation is received between 15 March - 15 May, 2010. No refunds will be made for cancellations received after 15 May, 2010.

Student Conference Registration (USD)		
	Before May 1, 2010	After May 1, 2010
Full time Student Registration	395	445
Student Full-Day Tutorial Registration	305	365
Student Half-Day Tutorial Registration	200	225
Best deal for students (Note 3)	595	695
One Conference Book (Note 4)	72	72
Extra reception dinner ticket	80	80

**Note 3.** This package includes conference registration plus one full day or two half-day Tutorials. An official letter (in English) from your University or School, duly signed and stamped, indicating your current student status must be submitted when registering. Please send a scanned copy of this letter to [aeiadmin@insightbb.com](mailto:aeiadmin@insightbb.com)

**Note 4.** All hard-cover conference books will be published by Taylor & Francis with the average projected size of 700 pages per book.

# Conference Exhibition

Exhibits provide state-of-the-art ergonomics products, systems and services for the users, professionals, and researchers in the AHFE field. Organizations interested in exhibiting or advertising in the Advance Program and/or Final Program should contact the Conference Communication and Exhibition Chair: Abbas Moallem, [exhibits@ahfe2010.org](mailto:exhibits@ahfe2010.org)

The price of a standard booth is \$1295.00 which includes:

- standard booth size: 10 x 10 feet
- 8' high back
- 3' high side drapes

# Conference Contacts

## **General Conference Chair**

**Gavriel Salvendy**

[salvendy@purdue.edu](mailto:salvendy@purdue.edu)

Purdue University, USA and

Tsinghua University, P.R. China

## **General Program Chair**

**Waldemar Karwowski**

[wkarwowski@gmail.com](mailto:wkarwowski@gmail.com)

## **Communication & Exhibition Chair**

**Abbas Moallem**

[exhibits@ahfe2010.org](mailto:exhibits@ahfe2010.org)

## **Conference Administrator**

**Laura Abell**

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AHFE 2010 Conference Administrator

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Palm Trees at Miami Beach

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# AHFE International 2010

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