33rd International Conference on
INFORMATION TECHNOLOGY INTERFACES

Conference Program

ITI 2011

Organized by

University Computing Centre
University of Zagreb

40 srce

June 27-30, 2011
Cavtat / Dubrovnik, Croatia

ITI 2011 Information for Participants and Presenters

CONFERENCE DESK / REGISTRATION

REGISTRATION starts on Sunday, June 26 at 19:00

CONFERENCE DESK WORKING HOURS:

Sunday,	June 26	19:00-21:00
Monday,	June 27	08:00-19:00
Tuesday,	June 28	08:00-20:00
Wednesday,	June 29	08:00-14:00
Thursday,	June 30	08:30-16:00

ENTRANCE TO THE CONFERENCE EVENTS

Each participant will receive an accreditation tag at registration.
The tag is the official pass for entry to all Conference events.

INTERNET and WIRELESS ACCESS

INTERNET ROOM

Internet room is located next to the Conference desk, and will be open during the
Conference working hours.

WIRELESS ACCESS

Wireless access is free of charge and provided by Hotel Croatia.

EDUROAM ACCESS

EDUROAM access, provided by SRCE, is also available to the Conference participants (SSID: eduroam), and covers Orlando Hall, Conference Desk and a section of the main entrance-hall. More information on EDUROAM is available at: www.eduroam.hr and www.eduroam.org

PRESENTATION EQUIPMENT

*   PC (Microsoft Windows XP and MS Office 2007)
*   projector

You should present your paper by using our equipment. Please bring your presentation on a USB memory key or on a CD media.

PRESENTATION TIME

Keynote presentations: 60 minutes, including discussion.
Contributed paper presentations: 15 minutes, including discussion.
Posters: 4 days on display. Discussion time: Tuesday, June 28, 15:30-19:00, Salon 5
At their option (and at the time scheduled) poster authors are given the opportunity to briefly present their work or just be available for questions / discussion.

STUDENT PAPER COMPETITION

The lead student author must present the paper during their designated Student Paper Competition Session at the Conference. The paper will be judged, along with others in the sessions, based on written technical content (70%) and on presentation effectiveness (30%). The Competition Judges will select one Outstanding Student Paper. A special certificate and a prize (to be announced) will be awarded to the Lead Student Author of the winning paper.

LANGUAGE

The official language of the ITI Conference is English.

MESSAGES

Please check the Conference bulletin board from time to time for possible changes to the program and for other announcements.

ITI 2011 Conference at-a-Glance

	TIME	A ORLANDO	B BOBARA	C SALON 5
Monday, June 27	09:15-10:00	1A. ITI 2011 OPENING and WELCOME		
	10:00-11:00	2A. Keynote Lecture: R. D. De Veaux		
	11:30-12:30	3A. Keynote Lecture: L. Young		
	12:45-13:30	4A. Statistics, Computing, Data Mining, Biometrics	4B. Technology Enhanced Education	
	13:30-14:30	LUNCH		
	14:30-15:30	Coffee with Keynote Lecturers: R. De Veaux, L.Young		
	15:30-17:00	5A. Statistics, Computing, Data Mining, Biometrics	5B. Technology Enhanced Education	5C. Presentation Skills Workshop
	17:15-18:00	6A. Statistics, Computing, Data Mining, Biometrics	6B. Technology Enhanced Education	6C. Presentation Skills Workshop
	18:30-20:00	7A. Panel Discussion		
	21:00-22:30	ITI Welcome Cocktail, 21:00-22:30 (light dinner included)		
Tuesday, June 28	08:30-09:45	8A. Business Intelligence, Inf. Systems and Databases	8B. Technology Enhanced Education	8C. Knowledge Management and Colaboration Systems
	10:00-11:00	9A. Keynote Lecture: R. Herschel		
	11:30-12:30	10A. Special Lecture: X. Liu		
	12:45-13:30	11A. Business Intelligence, Inf. Systems and Databases		
	13:30-14:30	LUNCH		
	14:30-15:30	Coffee with Keynote Lecturers: R.Herschel, X.Liu		
	15:30-17:00	12A. Information Technology in Business and Government	12B. Workshop Useful Statistical Concepts	12C. Poster Session
	17:15-19:00	13A. TInformation Technology in Business and Government	13B. Workshop Useful Statistical Concepts	13C. Poster Session
	19:30-20:00		14B. IPC Meeting	
	21:00-	ITI Night Club Party, 21:00		
Wednesday, June 29	08:30-09:45	15A. Information Technology in Business and Government	15B. Modeling, Simulation and Optimization	
	10:00-11:00	16A. Keynote Lecture: A. Vinze		
	11:30-12:30	17A. Leveraging IS for Compet. in Trans. Econ.	17B. Modeling, Simulation and Optimization	17C. Theory of Computing, Comp. Meth. and SW Engineering
	12:30-13:30	18A. Leveraging IS for Compet. in Trans. Econ.	18B. Modeling, Simulation and Optimization	18C. Networking, Grids, Middleware and Distributed Platforms
	13:30-14:30	LUNCH		
	15:00-24:00	ITI Excursion: 15:00 and ITI Conference Dinner: 20:00		
Thursday, June 30	09:00-09:45	19A. BIOSTAT School		
	10:00-11:00	20A. Special Lecture: M. Schiffers		
	11:30-12:30	21A. BIOSTAT School	21B. Networking, Grids, Middleware and Distributed Platforms	21C. Human Computer Interaction
	12:30-13:30	22A. BIOSTAT School	22B. Networking, Grids, Middleware and Distributed Platforms	
	13:30-14:30	LUNCH		
	14:30-15:30	Coffee with Keynote Lecturer: A.Vinze		
	15:30-16:00	23A. ITI 2011 CLOSING and AWARDS		

ITI 2011 Conference Program Events

CONTRIBUTED PAPER SESSIONS

Special Topic/Session:
    "Statistics, Computing and IT in the Coming Decade"

Topics of interest:
    Minitrack: Leveraging IS for Competitiveness in Transition Economies
    Networking, Grids, Middleware and Distributed Platforms
    Business Intelligence, Information Systems and Databases
    Knowledge Management and Collaboration Systems
    Human Computer Interaction
    Technology Enhanced Education
    Information Technology in Business and Government
    Data Mining and Biometrics
    Modeling, Simulation and Optimization
    Theory of Computing, Computing Methodologies and Software Engineering

KEYNOTE LECTURES

Richard D. De Veaux, Williams College, Massachusetts, USA
    Title: *The Seven Deadly Sins of Data Mining - and How to Avoid Them*
    🕐 Monday, June 27, 10:00 - 11:00, Orlando Hall.

Richard Herschel, Saint Joseph's University, Philadelphia, USA
    Title: *Business Intelligence*
        Opportunities for Research
    🕐 Tuesday, June 28, 10:00 - 11:00, Orlando Hall.

Xiaohui Liu, Brunel University, Uxbridge, UK
    Title: *Intelligent Data Analysis for Complex Systems*
    🕐 Tuesday, June 28, 11:30 - 12:30, Orlando Hall.

Ajay S. Vinzé, Arizona State University, USA
    Title: *Preparedness and Response*
        New Roles and Responsibilities for IT
    🕐 Wednesday, June 29, 10:00 - 11:00, Orlando Hall.

Linda J. Young, University of Florida, USA
    Title: *Relating Health Outcomes to Environmental Factors:*
        Assessing Uncertainty in the Presence of Predicted Environmental Factors
    🕐 Monday, June 27, 11:30 - 12:30, Orlando Hall.

SPECIAL LECTURE

Michael Schiffers, Ludwig-Maximilians-Universität, Munich, Germany
    Title: *Folded Interaction Systems and Their Application to the Survivability Analysis of Unbounded Systems*
    🕐 Thursday, June 30, 10:00 - 11:00, Orlando Hall.

ITI 2011 - Panel Discussions / Workshops

PANEL DISCUSSION

Title: ***"Strengths, Weaknesses, Opportunities and Threats Coming from New Interfaces between Statistics and IT "***

Moderator: Richard D. De Veaux, Williams College, Massachusetts, USA

Panelists: Xiaohui Liu, Brunel University, Uxbridge, UK

Vesna Luzar-Stiffler, SRCE, University of Zagreb, Croatia

Diana Simic, University of Zagreb, Croatia

Linda J. Young, University of Florida, USA

🕐 Monday, June 27, 18:30 - 20:00, Orlando Hall.

All participants are invited to contribute to the discussion.

WORKSHOPS

Title: ***"If Your Parachute Doesn't Open, It Won't Matter What Color It Is"***

Presenter: George S. Nezlek, Independent Systems Consultant, Michigan, USA

🕐 Monday, June 27, 15:30 - 18:00, Salon 5

Abstract: Presentation Skills Workshop 2011 will address issues on the importance of proper form, of avoiding the pitfalls that lead to weak audience interest, and of the suboptimal use of technical and visual aids. This workshop will help authors to focus on things to do and things to avoid when giving presentations that add value to their research. It is designed for students and other first-time presenters, but all are welcome.

Title: ***"Useful Statistical Concepts for Engineers and Researchers with an Interest to Publish Internationally"***

🕐 Tuesday, June 28, 15:30 - 19:00, Bobara Hall.

ITI 2011 Committees

Chair:

Vesna Luzar-Stiffler, SRCE University Computing Centre, University of Zagreb, Croatia

Vice-Chairs:

Nancy Flournoy,	University of Missouri-Columbia, USA
Keiichi Kaneko,	Tokyo University of Agriculture and Technology, Japan
Jasna Kuljis,	Brunel University, UK
Zelimir Kurtanjek,	University of Zagreb, Croatia
Robert Manger,	University of Zagreb, Croatia
Olivera Marjanovic,	The University of Sydney, Australia
George S. Nezlek,	Independent Systems Consultant, USA
Mirjana Pejic Bach,	University of Zagreb, Croatia
Thurasamy Ramayah,	Universiti Sains Malaysia, Malaysia
Diana Simic,	University of Zagreb, Croatia

Members:

Hojjat Adeli, USA
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Ivan Bratko, Slovenia
Felix Breitenecker, Austria
Leo Budin, Croatia
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Bojana Dalbelo Basic, Croatia
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Ivan Futo, Hungary
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Vlatka Hlupic, UK
Andras Javor, Hungary
Nenad Jukic, USA
Damir Kalpic, Croatia
Josipa Kern, Croatia
Slavko Krajcar, Croatia

Dieter Kranzlmüller, Germany
Tarzan Legovic, Croatia
Sven Loncaric, Croatia
Nikos E. Mastorakis, Greece
Dunja Mladenic, Slovenia
Annie Morin, France
Ingram Olkin, USA
Ray J. Paul, UK
Mike Pidd, UK
Slobodan Ribaric, Croatia
Andrew F. Seila, USA
Darko Skorin-Kapov, USA
Asim Smailagic, USA
Wim Van Petegem, Belgium
Tapio Varis, Finland
Mladen A. Vouk, USA
Silvije Vuletic, Croatia
Katerina Zdravkova, R. Macedonia
Blaz Zupan, Slovenia

BIOSTAT SYMPOSIUM 2011

18th MEETING OF RESEARCHERS IN BIOMETRICS / STATISTICS

BIOSTAT Topics:

- Data Visualization
- Space Reduction Methods
- Prediction and Classification
- Computationally Intensive Methods
- Time and Space Modeling, etc.

16th SCHOOL OF BIOMETRICS

Title: *Analysis of Areal Health Data*
Invited Lecturer: Linda J. Young, University of Florida, USA
Chair: Anamarija Jazbec
☉ Thursday, June 30, 09:00 - 09:45 and 11:30 - 13:30, Orlando Hall.

Abstract: Health data are often not available at the individual level out of concern for individual's privacy. Instead, data may be reported for areal units, such as parishes, counties, census tracts, etc. In this short course, the challenges associated with working with areal health data when the goal is to draw inference about individual health will be considered. Because health and exposure data are usually observed on different spatial units, the spatial exposure and health outcomes data must be linked on a common spatial scale for analysis. Approaches to assessing the association between health outcomes and environmental exposures when the linkage is for areal units is the primary focus of the course.

CO-ORGANIZERS

SRCE - University Computing Centre   HBMD - Croatian Biometric Society

ITI 2011 Conference Social Events

ITI WELCOME COCKTAIL – Monday, June 27, 21:00 – 22:30

All the participants are kindly invited to the welcome cocktail, which will take place in the area adjacent to the swimming pool of the Hotel Croatia. Light dinner and drinks will be served.

Please have your accreditation tag ready to enter.

Additional tickets are available for sale at the Conference desk.

ITI NIGHT CLUB PARTY – Tuesday, June 28, 21:00 - ....

Join your colleagues at ITI Night Club Party on Tuesday evening in the Night Bar Poseidon. We are providing two coupons that you can exchange for two complimentary drinks at the Night Bar.

ITI CONFERENCE LUNCHES – June 27-30, 13:30 - 14:30

Lunches are included in the conference regular fee and will be served in "Konavle" restaurant.

Your Conference pack contains four Lunch Tickets that are the official passes to the lunch room. Please note that Lunch Tickets are color coded and valid for the day indicated on the ticket.

Children present at lunch should have Lunch Tickets in accordance to the Hotel regulations. Additional Lunch Tickets are available for sale at the Conference desk.

COFFEE BREAKS AND „K&K" TIME SLOTS – June 27-30

Refreshments will be served during coffee breaks (morning and afternoon, usually on the Orlando Hall terrace) and during "Kava" (coffee) with Keynote Speakers ("K&K") time slots (14:30-15:30) daily in the Quiet Salon.

TO VISIT THE CITY OF DUBROVNIK

If you wish to visit the city of Dubrovnik during or after the Conference, please contact a tourist agency in the Hotel lobby.

TICKETS FOR THE ITI EXCURSION AND CONFERENCE DINNER

! If you plan to join the ITI Excursion and Conference Dinner, please fill in the Excursion and Conference Dinner form (provided with the Conference materials) and make sure to exchange it for the Excursion and Conference Dinner Tickets (with coupons) at the Conference Desk not later than **!**

Tuesday, June 28, 9:00 a.m.

Additional Excursion and Conference Dinner Tickets are available for sale at the Conference desk.

ITI 2011 Conference Social Events

Excursion bus departs at 15:00 from main entrance of the Hotel Croatia and returns around 19:00.

Our first stop on a tour to the valley of Konavle is an old mill on the river Ljuta where we'll see a presentation how flour used to be made by grinding wheat in water mills. After a welcome drink, our host will serve us home-made bread, cheese, prosciutto and local wine.

Panoramic drive through Konavle will follow, with a photo stop in Molunat – a small fishing and tourist village, located in one of the most beautiful bays in the southern Adriatic sea.

Afterwards, we'll visit the farm house Glavić, see an animal farm with a donkey, and witness a demonstration of cooking in charcoal ovens and traditional making of liquor and olive oil.

Our last stop is winery Crvik, where we will sample local wines, walk through the wine museum and vineyard, and learn a little about wine making.

To board the bus, each participant must have Excursion Bus Ticket in hand.

✓ *Please dress casually for the Excursion.*

ITI CONFERENCE DINNER – Wednesday, June 29, 20:00 – 24:00

Restaurant Spinaker is located at the beach in Hotel Croatia. You can enjoy a gastronomic experience with a beautiful view of the town of Cavtat across the bay. Lovely atmosphere will be enhanced by the sound of waves breaking on the shore and the light of the candles. The event will be completed by live band performance.

✓ Conference Dinner begins at 20:00.
✓ You can dress up for the Conference Dinner.
✓ Please have your Conference Dinner Ticket (with coupons) on the table.

NOTES

Time	A Orlando	B Bobara	C Salon 5
09:15-10:00	**Session 1A** iTi 2011 **Opening & Welcome**		
10:00-11:00	**Session 2A** **KEYNOTE LECTURE** Chair: Vesna Luzar-Stiffler **De Veaux, R.** *The Seven Deadly Sins of Data Mining - and How to Avoid Them*		
11:00-11:30	☕🍷	iTi 2011 Welcome Drink (Sponsored by Hotel Croatia)	
11:30-12:30	**Session 3A** **KEYNOTE LECTURE** Chair: Vesna Luzar-Stiffler **Young, L. J.**, Lopiano, K. K., Gotway, C. A. *Relating Health Outcomes to Environmental Factors: Assessing Uncertainty in the Presence of Predicted Environmental Factors*		
12:45-13:30	**Session 4A** **STATISTICS, COMPUTING, DATA MINING, BIOMETRICS** Chair: Vesna Luzar-Stiffler Karlovčec, M. (Student paper) *Information Extraction from Receipts Using Machine Learning* Trojacanec, K., Madjarov, G., Loskovska, S., Gjorgjevikj, D. (Student paper) *Hierarchical Classification Architectures Applied to Magnetic Resonance Images* Ion, A. L., Udristoiu, S *An Experimental Framework for Learning the Medical Image Diagnosis*	**Session 4B** **TECHNOLOGY ENHANCED EDUCATION** Chair: Keiichi Kaneko Hosogai, E., Mukai, T., Jung, S., Kowase, Y., Bossard, A., Xu, Y., Ishikawa, M., Kaneko, K. (Student paper) *A Multilingual Chat System with Image Presentation for Detecting Mistranslation* Szabó, I. (Student paper) *Comparing the Competence Contents of Demand and Supply Sides on the Labour Market* Komar, M., Grbic, D., Cupic, M. *Solving Exam Timetabling Using Distributed Evolutionary Computation*	

Time	A Orlando	B Bobara	C Salon 5
13:30-14:30	✕ CONFERENCE LUNCH (Restaurant Konavle, Hotel Croatia)		
14:30-15:30	☕☕ Coffee with Keynote Lecturers: R. De Veaux and L. Young (Quiet Salon, Hotel Croatia)		
15:30-17:00	**Session 5A** **STATISTICS, COMPUTING, DATA MINING, BIOMETRICS** Chair: Anamarija Jazbec Pestana, D. D., Aleixo, S. M. *Stuttering Cantor-Like Random Sets* Santos, R. *Simulation Analysis of Statistical Properties of Random Polygonal Lines Iteratively Generate on the Plane* Markoč, Z., Hlupić, N., Basch, D. *Detection of Suspicious Patterns of Energy Consumption Using Neural Network Trained by Generated Samples* Doğan, Y., Örücü, F., Kut, A., Radevski, V. *Optimizing the Equation for a Dataset with Corresponding Attributes by Hybrid Genetic Algorithm* Kudelić, R., Konecki, M., Maleković, M. *Mind Map Generator Software Model with Text Mining Algorithm* Jakopec, T., Papić, A., Selthofer, J. *Inside Croatian National Top-Level Domain: Analysis of Technical Quality According to W3C Standards*	**Session 5B** **TECHNOLOGY ENHANCED EDUCATION** Chair: Keiichi Kaneko Balaban, I., Mu, E., Divjak, B. *Critical Success Factors for the Implementation of the New Generation of Electronic Portfolio Systems* Smolyaninova, O. G, Shilina, N. G. *ePortfolio in Higher Educational Institutions of Russia* Lustigova, Z., Novotna, V., Kedzierska, E., Kawecka, E. *The Role of e-Labs in Promoting Conceptual Understanding of Science Students (Reflection in ICT for IST Project Resource Pack)* Papić, A. *Factors Influencing the Innovative Use of Information and Communication Technology in Education by High School Teachers* Pilav-Velic, A., Habul, A. *Does Social Computing Provide Satisfaction for Modern Learner?* Fetaji, M., Fetaji, B. *Devising M-learning Usability Framework*	**Session 5C** **WORKSHOP** Presenter: George S. Nezlek Title: *"If Your Parachute Doesn't Open, It Won't Matter What Color It Is"*
17:00-17:15	☕ COFFEE BREAK (Orlando Hall Terrace)		

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Time	A Orlando	B Bobara	C Salon 5
17:15-18:00	**Session 6A** **STATISTICS, COMPUTING, DATA MINING, BIOMETRICS** Chair: Marija Pecina Habus-Korbar, A., Tepic, N., Culig, B., Luzar-Stiffler, V. *Classification and Profiles of Students Based on Their Motivations Concerning Higher Education* Koruga, P., Bača, M., Schatten, M. *Analysis of Craniofacial Morphology Changes during Aging and Their Connection with Facial Age Estimation* Marras, I., Nikolaidis, N., Pitas, I. *Frontal Facial Pose Recognition Using a Discriminant Splitting Feature Extraction Procedure*	**Session 6B** **TECHNOLOGY ENHANCED EDUCATION** Chair: Igor Balaban Radosevic, D., Orehovacki, T. *An Analysis of Novice Compilation Behavior Using Verificator* Fetaji, B., Fetaji, M., Kaneko, K. *Comparative Study of Efficiency among the Developed MLUAT Methodology in Comparison with Qualitative User Testing Method and Heuristics Evaluation* Stolikj, M., Ristov, S., Ackovska, N. *Challenging Students Software Skills to Learn Hardware Based Courses*	**Session 6C** **WORKSHOP** Presenter: George S. Nezlek Title: *"If Your Parachute Doesn't Open, It Won't Matter What Color It Is"*
18:30-20:00	**Session 7A** **PANEL** Moderator: Richard D. De Veaux **"Strengths, Weaknesses, Opportunities and Threats Coming from New Interfaces between Statistics and IT"** Panelists: Xiaohui Liu, Vesna Luzar-Stiffler, Diana Simic, Linda J. Young		
21:00-22:30	✗⊙🍴 ITI WELCOME COCKTAIL (near Hotel Croatia swimming pool - light dinner included)		

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Time	A Orlando	B Bobara	C Salon 5
08:30-09:45	**Session 8A** **BUSINESS INTELLIGENCE, INFORMATION SYSTEMS AND DATABASES** Chair: Olivera Marjanovic Trattner, C. (Student paper) *Improving the Navigability of Tagging Systems with Hierarchically Constructed Resource Lists: A Comparative Study* Orehovacki, T., Schatten, M., Lovrencic, A. *Implementing a Logic System for Testing Functional Independent Normal Form in Relational Databases* Mólnar, B., Szabó, G. *Information Architecture of ERP Systems at Globalised Enterprises in a Small EU Member State* Trad, A., Kalpic, D. *The "Selection, Training, Follow and Evaluation Framework" (STFEF) for Manager's in Business Innovation Transformation Projects" A Holistic Overview* Dimovski, T., Mitrevski, P. *Connection Fault-Tolerant Model for Distributed Transaction Processing in Mobile Computing Environment*	**Session 8B** **TECHNOLOGY ENHANCED EDUCATION** Chair: Keiichi Kaneko Fabac, R., Vidacek-Hains, V., Pazur, K. *Attitudes of Undergraduate Students with Regards to the Information and Communication Aspects of Study* Horvat, J., Oreski, D., Markic, D. *Gender Differences in the Internet Usage among Postgraduate Students* Apostolova Trpkovska, M. *A Study of Student Perceptions on Blended and Online Learning over Traditional Classroom Instruction at South East European University* Dukić, D., Penny, K. I. *Analysis of Croatian and Scottish Students' Attitudes towards e-Learning* Kacian, D., Filipović, A. M. *Assessing Learning Outcomes by Using State-of-the-art Technology*	**Session 8C** **KNOWLEDGE MANAGEMENT AND COLLABORATION SYSTEMS** Chair: Gary R. Oliver Moraru, A., Fortuna, C., Mladenic, D. (Student paper) *A System for Publishing Sensor Data on the Semantic Web* Bradeško, L., Fortuna, B., Mladenić, D., Starc, J. *Semantic Technologies for Personal Information Management* Oliver, G. R. *The Pleasures and Perils of Sharing Information: A Pilot Case Study of a Male South African Bricklayer* Verweij, H., Windhouwer, M., Wittenburg, P. *Knowledge Management for Small Languages* Hasani-Mavriqi, I., Leitner, H., Helic, D., Maurer, H. *Implementation of a Wiki-based Information and Communication System for Academia Europaea*
10:00-11:00	**Session 9A** **KEYNOTE LECTURE** Chair: Olivera Marjanovic **Herschel, R.** *Business Intelligence: Opportunities for Research*		
11:00-11:30	COFFEE BREAK (Orlando Hall Terrace)		

Time	A Orlando	B Bobara	C Salon 5
11:30-12:30	**Session 10A** **KEYNOTE LECTURE** Chair: Robert Manger **Liu, X.** *Intelligent Data Analysis for Complex Systems*		
12:45-13:30	**Session 11A** **BUSINESS INTELLIGENCE, INFORMATION SYSTEMS AND DATABASES** Chair: Olivera Marjanovic Velic, M. *Analysis of Correlation between CROBEX Index Value Change, Investment Fund Type, Investment Portfolio and Investment Funds Share Value Change using Data Mining Techniques* Marjanovic, O. *Addressing the ICT-related Challenges of Business Intelligence Education* Němec, R., Menčlová, E. *The Usage of Open-source Business Intelligence in the Czech Republic*		
13:30-14:30	✕ CONFERENCE LUNCH (Restaurant Konavle, Hotel Croatia)		
14:30-15:30	☕☕ Coffee with Keynote Lecturers: R. Herschel and X. Liu (Quiet Salon, Hotel Croatia)		
15:30-17:00	**Session 12A** **INFORMATION TECHNOLOGY IN BUSINESS AND GOVERNMENT** Chair: Diana Šimić Pihir, I., Pihir, V., Vidačić, S. *Improvement of Warehouse Operations through Implementation of Mobile Barcode Systems Aimed at Advancing Sales Process*	**Session 12B** **WORKSHOP** Presenter: Title: *„Useful Statistical Concepts for Engineers and Researchers with an Interest to Publish Internationally"*	**Session 12C** **POSTER SESSION** Chair: Anja Habus-Korbar **BUSINESS INTELLIGENCE, INFORMATION SYSTEMS AND DATABASES** Hancu, L. *BizTop - The Anatomy of a Merger Decision Support System*

Time	A Orlando	B Bobara	C Salon 5

15:30-17:00	⮌ Session 12A (continuation)
	
	INFORMATION TECHNOLOGY IN BUSINESS AND GOVERNMENT
	
	<u>Chair: Diana Šimić</u>
	
	Dukić, B., Meler, M., Katić, M.
	  Relationship Improvement Model for Visitors of the Nature Park Kopački rit through Usage of Mobile Technology
	
	Androcec, D., Vrcek, N.
	  E-service Cost-Benefit Analysis in the Public Sector
	
	Hodorogea, T., Otto, I. S.
	  Security of Business to Business and Business to Customer Software Applications Based on the Central Dogma of Molecular Biology (CDMB) and Evolutionary Models
	
	Šen, H., Begičević, N., Gerić, S.
	  Decision Making on Customer Relationship Management Solution Using the Analytic Network Process
	
	Trad, A., Kalpic, D.
	  The "Selection, Training, Follow and Evaluation Framework" (STFEF) for Manager's in Business Innovation Transformation projects": The Human Factor
			⮌ Session 12C (continuation)
			
			POSTER SESSION
			
			Chair: Anja Habus-Korbar
			
			DATA MINING AND BIOMETRICS
			
			Tepic, N., Habus-Korbar, A.
			  Gap between State Matura and School Grades
			
			INFORMATION TECHNOLOGY IN BUSINESS AND GOVERNMENT
			
			Grubisic, L., Grubisic, M., Rutalj, D.
			  Quantitative Analysis of Scientific Collaboration: An Experimental Study Based on k-core Decomposition of Collaboration Graphs

17:00-17:15	☕ COFFEE BREAK (Orlando Hall Terrace)		

Time	A Orlando	B Bobara	C Salon 5
17:15-19:00	Session 13A **INFORMATION TECHNOLOGY IN BUSINESS AND GOVERNMENT** <u>Chair: Diana Šimić</u> Tomic Rotim, S., Dobsa, J. *Clustering of European Countries by Their Readiness for Effective Utilization of ICT* Dukić, D., Dukić, G., Kvesić, Lj. *A Credit Scoring Decision Support System* Nikolovska, J., Trajkovik, V. *Communication Enabled Business Processes: Case Study on ATM Credit Card Limit Request Services* Cabral, I., Grilo, A., Leal, R. P., Machado, V. C. *Modelling Lean, Agile, Resilient, and Green Supply Chain Management* Jolevski, I., Markoski, A., Pasic, R. *Smart Vehicle Sensing and Classification Node with Energy Aware Vehicle Classification Algorithm* Čovič, Z., Ivković, M., Boban, M., Ćosić, Z. *Development of Integrated Model for Health Promotion in Medical Informatics* Markic, D., Horvat, J., Oreški, D. *Human Resource Information System in Croatian Companies*	Session 13B **WORKSHOP** Presenter: Title: *„Useful Statistical Concepts for Engineers and Researchers with an Interest to Publish Internationally"*	Session 13C **POSTER SESSION** <u>Chair: Bekim Fetaji</u> **MODELING, SIMULATION AND OPTIMIZATION** Abrahamowicz, M., Sylvestre, M.-P., MacKenzie, T. A. *Permutational Algorithms for Simulating Event Times Conditional on Time-Varying Effects and Time-Dependent Covariates* Volner, R. *Modeling of Intelligent Multi-agent Systems* **NETWORKING, GRIDS, MIDDLEWARE AND DISTRIBUTED PLATFORMS** Ocenasek, P., Trchalik, R. *Approaches to the Security and Payment Protocols Design: State of the Art* **THEORY OF COMPUTING, COMPUTING METHODOLOGIES AND SOFTWARE ENGINEERING** Ceh, I., Crepinsek, M., Kosar, T., Mernik, M. *A Framework for Building Domain Specific Languages From OWL Ontologies*
19:30-20:00		Session 14B **IPC MEETING** <u>Chair: Vesna Lužar-Stiffler</u>	
21:00-......	🍷👫🕺	ITI 2011 NIGHT CLUB PARTY (Night Bar Poseidon)	

Time	A Orlando	B Bobara	C Salon 5
08:30-09:45	**Session 15A** **INFORMATION TECHNOLOGY IN BUSINESS AND GOVERNMENT** <u>Chair: Gordana Dukic</u> Dukić, G., Turkalj, D., Bodražić, B. *The Purposes of Croatian Managers' Computer Usage* Achkoski, J., Trajkovik, V. *Intelligence Information System (IIS) with SOA-based Information Systems* Dagher, J., Kuzic, J. *ERP Implementation in Australia*	**Session 15B** **MODELING, SIMULATION AND OPTIMIZATION** <u>Chair: Želimir Kurtanjek</u> Hudec, J. *An Efficient Technique for Processor Automatic Functional Test Generation Based on Evolutionary Strategies* Kotevski, Z., Mitrevski, P. *Level Aware Model for Peer to Peer Live Video Streaming*	
10:00-11:00	**Session 16A** **KEYNOTE LECTURE** <u>Chair: Mirjana Pejić Bach</u> **Vinze, A.** *Preparedness and Response:* *New Roles and Responsibilities for IT*		
11:00-11:30	☕🍷	COFFEE BREAK (Orlando Hall Terrace)	
11:30-12:30	**Session 17A** **LEVERAGING IS FOR COMPETITIVENESS IN TRANSITION ECONOMIES** <u>Chair: Mirjana Pejić Bach</u> Bosilj Vuksic, V., Pejic Bach, M., Marjanovic, O. *Business Process Orientation in Croatian Companies:* *a Multi-site Case Study* Schatten, M., Fabac, R., Duricin, T. *Modeling Organizational Integration using Mixing Patterns*	**Session 17B** **MODELING, SIMULATION AND OPTIMIZATION** <u>Chair: Želimir Kurtanjek</u> Atanasijević-Kunc, M., Drinovec, J. *Social and Economical Burden of Obesity – Multi-Model Analysis* Liopa-Tsakalidi, A., Konstantinidou-Doltsinis, S., Beligiannis, G. N. *Studies on the Efficacy of Extracts of Reynoutria Sachalinensis on Cucumber Growth Using the Richards Function and Evolutionary Modelling*	**Session 17C** **THEORY OF COMPUTING, COMPUTING METHODOLOGIES AND SOFTWARE ENGINEERING** <u>Chair: Robert Manger</u> Yıldırım, M., Tarhan, A., Kut, R. A. (Student paper) *Quantitative Analysis of the Software Change Process Applied for a Large-Scale Banking Application*

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Time	A Orlando	B Bobara	C Salon 5
11:30-12:30	➲ Session 17A (continuation) **LEVERAGING IS FOR COMPETITIVENESS IN TRANSITION ECONOMIES** Chair: Mirjana Pejić Bach Škrinjar, R., Bosilj-Vukšić, V., Indihar Štemberger, M. *Empirical Examination of the Dimensions of Business Process Orientation* Bajgorić, N., Spremić, M., Turulja, L. *Implementation of the IT Governance Standards through Business Continuity Management: Cases from Croatia and Bosnia-Herzegovina*	➲ Session 17B (continuation) **MODELING, SIMULATION AND OPTIMIZATION** Chair: Želimir Kurtanjek Sarajlic, As., Sarajlic, Am. *Definition, Analytical Derivation and Optimization of the Lower Credit Limit in Mobile User's Prepaid Account for IMS Services* Djordjevic, M., Brodnik, A. *Quantitative Analysis of Separate and Combined Performance of Local Searcher and Genetic Algorithm*	➲ Session 17C (continuation) **THEORY OF COMPUTING, COMPUTING METHODOLOGIES AND SOFTWARE ENGINEERING** Chair: Robert Manger Prstačić, S., Voras, I., Žagar, M. *Nested Componentization for Advanced Web Platform Solutions* Brođanac, P., Budin, L., Jakobović, D. *Parallelized Rabin-Karp Method for Exact String Matching* Glavas, G., Fertalj, K. *Metaheuristic Approach to Class Responsibility Assignment Problem*
12:30-13:30	Session 18A **LEVERAGING IS FOR COMPETITIVENESS IN TRANSITION ECONOMIES** Chair: Ajay Vinze Zoroja, J. *Internet Usage in Developed and Post-Communist Europe: Trends and Differences* Klačmer Čalopa, M., Kukec, S. K., Šestanj-Perić, T. *Impact of the Recent Economic Crisis on the ICT Industry: Research of Croatian Companies* Dumicic, K. *Use of the Internet in the Job Search Process in European Countries: Position of Croatia* Hamiti, M., Dika, A. *Challenges of Computers and IT in the Coming Decade, Case Study: SEE-University in Macedonia*	Session 18B **MODELING, SIMULATION AND OPTIMIZATION** Chair: Želimir Kurtanjek Tanković, N., Vukotić, D., Žagar, M. *Executable Graph Model for Building Data-Centric Applications* Strnad, D., Guid, N. *Parallel Alpha-Beta Algorithm on the GPU* Grigorie, T. L., Edu, I. R., Corcau, J. I. *Fuzzy Logic Denoising of the Miniaturized Inertial Sensors in Redundant Configurations* Kotevski, Z., Mitrevski, P. *A Simple FSPN Model of P2P Live Video Streaming System*	Session 18C **THEORY OF COMPUTING, COMPUTING METHODOLOGIES AND SOFTWARE ENGINEERING** Chair: Robert Manger Kosar, T., Mernik, M., Carver, J. C. *The Impact of Tools Supported in Integrated-Development Environments on Program Comprehension* Juričić, V. *Detecting Source Code Similarity Using Low-level Languages*

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Time	A Orlando	B Bobara	C Salon 5
13:30-14:30	✗ CONFERENCE LUNCH (Restaurant Konavle, Hotel Croatia)		
15:00-24:00	🚌✗ **ITI** 2011 EXCURSION (to Konavle) AND CONFERENCE DINNER (Restaurant „Spinaker")		

Time	A Orlando	B Bobara	C Salon 5
09:00-09:45	**Session 19A** **BIOSTAT SYMPOSIUM 2011** 18th Meeting of Researchers in Biometrics / Statistics 16th School of Biometrics Chair: Anamarija Jazbec Invited Lecturer: **Linda J. Young** *Title: Analysis of Areal Health Data*		
10:00-11:00	**Session 20A** **SPECIAL LECTURE** Chair: George S. Nezlek **Schiffers, M.,** Kranzlmüller, D. *Folded Interaction Systems and Their Application to the Survivability Analysis of Unbounded Systems*		
11:00-11:30	☕ COFFEE BREAK (Orlando Hall Terrace)		
11:30-12:30	**Session 21A** **BIOSTAT SYMPOSIUM 2011** 18th Meeting of Researchers in Biometrics / Statistics 16th School of Biometrics Chair: Anamarija Jazbec Invited Lecturer: **Linda J. Young** *Title: Analysis of Areal Health Data*	**Session 21B** **NETWORKING, GRIDS, MIDDLEWARE AND DISTRIBUTED PLATFORMS** Chair: George S. Nezlek Voras, I., Mihaljević, B., Orlić, M. (Student paper) *Criteria for Evaluation of Open Source Cloud Computing Solutions* Pohorec, S., Zorman, M. *The Challenges of the Move from the Desktop to the Cloud* Satoh, I. *Mobile Agent Middleware for Dependable Distributed Systems*	**Session 21C** **HUMAN COMPUTER INTERACTION** Chair: Darko Dukić Solina, F., Ravnik, R. *Fixing Missing Eye-Contact in Video Conferencing Systems* Zoidi, O., Tefas, A., Pitas, I. *Object Tracking Based on Local Steering Kernels for Drinking Activity Recognition* Mekovec, R., Vrček, N. *Factors That Influence Internet Users' Privacy Perception* De Paolis, L. T., Aloisio, G. *Advanced Interface for the Pre-Operative Planning in Pediatric Laparoscopy*

Time	A Orlando	B Bobara	C Salon 5
11:30-12:30		⮌ Session 21B (continuation) **NETWORKING, GRIDS, MIDDLEWARE AND DISTRIBUTED PLATFORMS** <div align=right>Chair: George S. Nezlek</div> Maly, F., Kriz, P., Slaby, A. *Mobile Oriented Software Architecture M Client M Client Server*	
12:30-13:30	Session 22A **BIOSTAT SYMPOSIUM 2011** 18th Meeting of Researchers in Biometrics / Statistics 16th School of Biometrics <div align=right>Chair: Anamarija Jazbec</div> Invited Lecturer: **Linda J. Young** *Title: Analysis of Areal Health Data*	Session 22B **NETWORKING, GRIDS, MIDDLEWARE AND DISTRIBUTED PLATFORMS** <div align=right>Chair: George S. Nezlek</div> Groš, S. *Security Risk Assessment of TeamViewer Application* Ocenasek, P. *Specification of Traces in the Security Protocols Analysis* Danciu, V. A., Kranzlmüller, D., Metzker, M. G., Yampolskiy, M. *A Border-Friendly, Non-overlay Mechanism for Inter-domain QoS Support in the Internet* Pattinson, C., Hajdarevic, K., Hadzic, A. *The Time Element in Proactive Network Defense Systems*	
13:30-14:30	✗ CONFERENCE LUNCH (Restaurant Konavle, Hotel Croatia)		
14:30-15:30	☕☕ Coffee with Keynote Lecturer: A. Vinze (Quiet Salon, Hotel Croatia)		
15:30-16:00	Session 23A **iTi 2011 CLOSING and AWARDS** <div align=right>Chair: Zoran Bekic</div>		
16:00-16:30	☕ FAREWELL COFFEE (Orlando Hall Terrace)		

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We want to thank all cooperating institutions, Conference Vice-chairs, Program Committee members, and reviewers for their support, and we wish all the participants successful and memorable stay in Cavtat.

<div align="right">

ITI Organizing Committee
University Computing Centre - SRCE

</div>

June 2011

Hotel Croatia, Cavtat

The Conference takes place at the luxurious hotel "Croatia" in Cavtat, only 10 minutes (6 km) from Dubrovnik International Airport. The hotel, located on a peninsula surrounded by the crystal clear Adriatic Sea offers a picturesque view of the city of Dubrovnik.

Hotel address:

Croatia Hotel, Frankopanska 10, 20210 Cavtat, Croatia
Tel: +385/(0)20/475-555, 478-055, Fax:+385/(0)20/478-213
Web: www.hotelcroatia.hr, e-mail: info@hotelcroatia.hr, sales@hotelcroatia.hr

Airport transfer

For transfer from hotel "Croatia" hotel to the airport please contact hotel reception. Local transportation include bus, boat, taxi, and rent-a-car services. For details, please check at the hotel reception.
Note: Boats for Dubrovnik depart every half hour (wear sun-screen).

OTHER USEFUL INFORMATION

Currency, Money and Banks

Croatia's unit of currency is the Kuna (Kn). Banks (banka) are generally open Monday to Friday 7.30 AM-7 PM (often with a break for lunch), and Saturday 7.30-11.30 AM. Money can also be changed in post offices, travel agencies and exchange offices (mjenjačnica), which have more flexible hours. Credit cards are generally accepted in hotels and restaurants, but be sure to ask before you order. You can also use ATMs (bankomat) to get cash. Many banks have ATMs in front of their building.
Banks: Cavtat (OTP, PBZ), Airport (OTP)
ATM machines: Hotel Croatia (PBZ), Cavtat (OTP, PBZ, ZB), Airport (PBZ, ZB)

Restaurants - good to know

The working hours of most restaurants are from 11AM till midnight. A restaurant's menu is shown at the entrance, as well as the signs of the credit cards accepted (most major credit cards are generally accepted). The price includes taxes, but the service charge is almost never included and is not mandatory. It is customary; however, that the guest who is satisfied with the service leaves a tip for the waiter, 10% of the total amount is usually a fair tip.

Drinking water

Drinking water in Dubrovnik is of very good quality, constantly controlled, and comes mostly from the Ombla River, 5 km from Dubrovnik.

Map of the Hotel Croatia

1. Hotel Reception and Main Lobby
2. ITI Conference Desk and Internet Room

3. Orlando Hall
4. Bobara Hall
5. Salon 5
6. Quiet Salon

7. Restaurant Cavtat
8. Restaurant Konavle
9. Restaurant Spinaker

10. Swimming Pool
11. Night Bar Poseidon

SEA

LEVEL (FLOOR)

X
IX
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VII
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NOTES