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Driver-car Interaction and Safety Conference
16-17th June 2016, Prague

Petr Bouchner
(conference chair)

Faculty of Transportation Sciences,
Czech Technical University in Prague

Invitation to the 5th Conference Volume

- Transtec 2007
 - 13.-15.9.2007 Prague
- DCI&I 2008
 - 17.-18.2008 Prague
- DCI&I 2009
 - 2.-3.11.2009 Prague
- DCI&I 2010
 - 2.-3.12.2010 Prague
- DCI&S 2014
 - 10.-12.2014 Děčín
- DCI&S 2016
 - 16.-17.6.2016 Prague



Driver-car Interaction and Safety Conference
June the 16-17th 2016, Prague



Organization and Scientific Committee

- **Organisation**

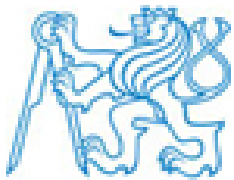
Bouchner Petr doc. Ing. Ph.D.
Novotný Stanislav doc. Ing. Ph.D.
First Jiří Ing.
Mík Josef Ing. Ph.D.
Mashko Alina Ing.
Skolilová Petra Ing.

- **Scientific committee**

doc. Ing. Petr Bouchner, Ph.D. (Faculty of Transportation Sciences, Czech Tech. Univ. in Prague, CZ)
doc. Ing. Stanislav Novotný, Ph.D. (Faculty of Transportation Sciences, Czech Tech. Univ. in Prague, CZ)
doc. Ing. Machan Jaroslav, CSc. (Škoda Auto, a.s.)
prof. Ing. Votruba Zdeněk, CSc. (Faculty of Transportation Sciences, Czech Tech. Univ. in Prague, CZ)
prof. Ing. Novák Mirko, DrSc. (Faculty of Transportation Sciences, Czech Tech. Univ. in Prague, CZ)
prof. Ing. Václav Matoušek, CSc. (University of West Bohemia, Pilsen, CZ)
prof. Drs. Dr. L.J.M. Rothkrantz (Delft University of Technology, NL)
doc. Ing. Ivo Drahotský, Ph.D. (Jan Perner Transport Faculty, University of Pardubice, CZ)
prof. Ing. Alicia Kalašová, CSc. (University of Žilina, SK)
prof. Ing. Mgr. Zlatko V. Sovreski, Ph.D. & Ph.D. (University St. Kliment Ohridski, Bitola, MK)

Organizer

- Czech Technical University in Prague Faculty of Transportation Sciences
- Driving Simulation Research Group
- Realization of the conference was supported by *SVK grant by Czech Technical University in Prague, Nr.SVK 47/16/F6.*



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Conference Structure

- Main themes of contributions:
 - Human-Machine Interaction
 - Human factors in transportation
 - Neuro-informatics
 - Informatics and Computer sciences
 - Interactive Simulations and Virtual Reality
 - Data analysis and data mining
 - Transportation science
 - Analysis of traffic accidents
 - Road safety inspection
 - Education and training
- Presentation Days + Posters + Virtual
- E-Proceedings
- Combined with exhibition Grand opening!



Conference Program

Thursday, June 16					
09:00	09:25	Registration		Conference chair associate prof.Bouchner	
09:25	10:00	Morning snack			
10:00	10:10	Grand Opening		Session chair associate prof.Radová	
10:10	10:45	1	Mirko Novák	FTS CTU / ICS ASCR	DRIVER ATTENTION AND DRIVING SAFETY
10:45	11:11	2	Michal Matowicky	FTS CTU	CROSS-STUDY RESEARCH ON UTILITY AND VALIDITY OF DRIVING SIMULATOR FOR DRIVER BEHAVIOR ANALYSIS
11:11	10:35	3	Sergey Makhortykh	Russian Academy of Sciences	LIBRARY OF MATHEMATICAL TRANSFORMS OVER ALGORITHMS OF SPECTRAL-ANALYTICAL DATA PROCESSING
11:35	12:00	4	Leon Rothkrantz	TU Delft	A DIGITAL CAR DRIVER ASSISTANT
12:00	12:25	5	William Deleenheer	KULeuven	DEVELOPMENT OF AN ELECTRIC BICYCLE FOR A SHARING SYSTEM IN PRAGUE
12:25	13:30	Lunch		Session chair prof.Votruba	
13:30	13:55	6	Dmitriy Rozhdestvenskiy	RICARDO / FTS CTU	SIMULATION OF ELECTRIC AND HYBRID VEHICLES IN A VEHICLE SIMULATOR BASED ON A DETAILED PHYSICAL MODEL, FOR THE PURPOSE OF HMI EVALUATION
13:55	14:20	7	Karel Bouchner	FTS CTU	MODEL CAR TRANSPORT SYSTEM - MODERN ITS EDUCATION TOOL
14:20	14:45	8	Zdeněk Barnet	FTS CTU	SPECIALIZED VIDEO-PLAYER FOR ANALYSES OF RECORDED COMPLEX DATA OBTAINED FROM FLOATING CARS
14:45	15:10	9	Tomáš Jizba	FTS CTU	INFLUENCE OF HMI ERGONOMY ON DRIVERS IN AREA OF COOPERATIVE SYSTEMS
15:10	15:35	Cofee break		Session chair Dr.Derbek	
15:35	16:00	10	Adam Orlický	FTS CTU	AUTOMATIC GENERATION OF ROAD INFRASTRUCTURE IN 3D FOR IMPLEMENTATION ON CAR SIMULATORS
16:00	16:25	11	Alina Mashko	FTS CTU	ASSESSMENT OF DRIVER FATIGUE WITH SUBJECTIVE METHODS
16:25	16:50	12	Josef Mik	FTS CTU	CORRELATION ANALYSIS OF VEHICLE FRONTAL IMPACT PARAMETERS
16:50	17:15	13	Martin Růžek	CIIRC CTU	Artificial neural network for models of human operator
17:15	18:00	Poster session and Traditional sweet pie break			

Friday, June 17					
08:30	08:50	Registration		Session chair associate prof.Bouchner	
08:50	09:15	14	Arnošt Matlafus	KPM CONSULT	SAFETY INCREASING ON TRANSPORT INFRASTRUCTURE CRITICAL POINTS FOR PUBLIC TRANSPORT AND HEAVY GOODS VEHICLES
09:15	09:40	15	Evzen Thoendel	Pragolet s.r.o.	Interactive Motion Platforms and Virtual Reality for Vehicle Simulators
09:40	10:00	16	Michal Nehasil	FTS CTU	MOTOSTUDENT 2016 COMPETITION
10:00	12:30	Exhibition Grand Opening + Lunch		Vedoucí sekce Dr. Mik	
12:30	13:05	CZ1	Jiří First (Jan Novotný)	FD ČVUT	DĚJEPIS BEZPEČNOSTI SILNIČNÍCH VOZIDEL
13:05	13:40	CZ2	Zdeněk Řiha	FD ČVUT	KREATIVNÍ DESTRUKCE V POČÁTČÍCH AUTOMOBILISMU
13:40	14:10	CZ3	Karel Jičínský	-	Josef Voříšek a karosérie automobilů Aero
14:10	14:50	CZ4	Jaroslav Větvíčka	WEDesign	Biodesign - Biodynamika, patenty přírody jako inspirace pro další tisíciletí
14:50	15:10	CZ5	Martin Farář	BESIP MDČR	Historie osvěty bezpečnosti na silnicích
15:10	15:45	0	reserved		
15:45	16:00	0	reserved		
Poster session					
		1	Boris Kucherov	University of Technology, Russia	HUMAN-MACHINE INTERACTION IN SOLVING TASKS OF THE PLANNING DEPARTMENT
		2	Martin Holub	FEL CTU	MICROSLEEPS AND THEIR DETECTION FROM THE BIOLOGICAL SIGNALS
		3	Lucie Žykova	FTS CTU	DRIVER'S ATTENTION EVALUATION USING NON-LINEAR DATA ANALYSIS
		4	Dragos Datcu	TU Delft	AFFECTIVE COMPUTING AND AUGMENTED REALITY FOR CAR DRIVING SIMULATORS
		5	Zlatko Sovretski	University "St. Climent Ohridski" in Bitola	TRAFFIC ACCIDENT HAPPENED ON 01.02.2013, A ROUND 22.00 PM IN RADOVISH, STR. "ST. SPASO RADOVISKI" BEFORE LTS "INTERPLAST" AND EMPLOYMENT BUREAU RADOVISH
		6	Kairatolla Abishev	S.Toraigyrov Pavlodar State University	THE QUESTION OF THE USE OF INTELLIGENT TRANSPORT ROAD TRANSPORT IN KAZAKHSTAN
		7	Hana Pechová	FME CTU	INVESTIGATION OF THE METAL MATERIALS FROM THE TERMS CARBON FOOTPRINT AND LOGISTICS OF TRANSPORT
		8	Inga Chudjaková, Jar. Tobiška	ŠKODA-AUTO	QFD EXAMPLE IN INTERACTION WITH HMI
		9	Libor Topol	-	RISKY DRIVER BEHAVIOR BEHIND THE WHEEL
		10	Václav Jirkovský	FTS CTU	STORED DATA HELPS TO PROPOSE NEW TRACKS
		11	Vaclav Matousek	ZCU Plzen	ROBOTIC SYSTEM FOR AUTOMATED AND RAPID VEHICLE INSPECTION

Contributions

- Sessions
 - Regular sessions
 - Poster session
- Contributions 31
 - CZ, NL, BE, RU, KZ, MA
 - 16 Presentations
 - 4 Czech presentatians
 - 11 Posters
- Breaks
 - Breakfast
 - Lunch
 - Famous pie session
 - Lunch and social evet at the Exhibition

Enjoy DCI&S 2016!

- Do not forget to attend exhibition “Czech Cabrio and Coupé”
- Do not miss opportunity to see Grand Opening – 17th from 10 o’clock
- Remember the paper due in September
- In case of questions use:
 - dcis@fd.cvut.cz
 - (bouchner@fd.cvut.cz)

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