

## **Department of Computer Science and Engineering**

Head of Department: Assoc. Prof. Tomáš Hruška, MSc, PhD

Tel: ++420 5 41212219

Fax: ++420 5 41211141

E-mail: [uivt@fee.vutbr.cz](mailto:uivt@fee.vutbr.cz)

### **I. STAFF**

#### **Professors:**

Prof. Ing. Václav Dvořák, DrSc., Prof. Ing. Ivo Serba, CSc.

#### **Associate Professors:**

Doc. RNDr. Milan Češka, CSc., Doc. Ing. Jan Honzík, CSc., Doc. Ing. Tomáš Hruška, CSc.,  
Doc. Ing. Jiří Kunovský, CSc., Doc. Ing. Miroslav Linhart, CSc., Doc. Ing. Zdena Rábová, CSc.,  
Doc. Ing. Miroslav Švéda, CSc., Doc. Ing. František Zbořil, CSc., Doc. Ing. Jaroslav Zendulka, CSc.

#### **Assistant professors:**

Dr. Ing. Miroslav Beneš, Ing. Vladimír Drábek, CSc., Ing. Miloš Eysselt, CSc., Ing. Otto Fučík,  
Dr. Ing. Petr Hanáček, Ing. Vladimír Janoušek, Ing. Dušan Kolář, Ing. Zdeněk Kotásek, CSc.,  
RNDr. Jitka Kreslíková, CSc., Dr. Ing. Petr Peringer, Ing. Petr Přikryl, Ing. Josef Schwarz, CSc.,  
Dr. Ing. Pavel Zemčík.

#### **Ph.D. Students (internal):**

Ing. Jaromír Bumbálek, Ing. Tomáš Bleša, Ing. Jiří Brázda, Ing. Jan Cibulka, Ing. Petr Cigánek,  
Ing. Daniel Cvrček, Ing. Martin Dobšík, Ing. Martin Fědor, Ing. František Grebeníček,  
Ing. Radovan Habáň, Ing. Milan Hrdlička, Ing. Petr Kolenčík, Ing. Zdeněk Korčák,  
Ing. Jaromír Marušinec, Ing. Jiří Matúš, Ing. Andrea Němcová, Ing. Viktor Němec,  
Mgr. Vladimír Nováček, Ing. Zdeněk Pavlas, Ing. Erik Pomykal, Ing. Pavel Pospíšil,  
Ing. Martin Ryšánek, Ing. Ivo Sedláček, Ing. Petr Sezemský, Ing. Tomáš Simon, Ing. Antonín Soušek,  
Ing. Luděk Šmíd, Ing. Petr Šťastný, Ing. Jiří Vašátko, Ing. Tomáš Vojnar.

#### **Foreign Ph.D. Students (internal):**

Ing. Azeddien Sllame

#### **Ph.D. Students (external):**

Ing. Michal Dobeš, Ing. Pavel Dostál, Ing. Otto Fučík, Ing. Petr Havel, Ing. Petr Havlíček,  
Ing. Jiří Hrdlička, Ing. Jiří Hronek, Ing. Jan Chochola, Ing. Michal Jankovský, Ing. Jaroslav Janoš,  
Ing. Vladimír Janoušek, Ing. Petr Lampa, Ing. Miloš Lenoč, Ing. Vladimír Medek,  
Ing. Karel Mikulášek, Ing. Karel Obluk, Ing. Miloň Papežík, Ing. Ljubomir Patev, Ing. Petr Přikryl,  
Ing. Jiří Rybička, Ing. Miroslav Slezák, Ing. Eduard Sojka, Ing. Elemír Števko, Ing. Jan Tomíšek,  
RNDr. Arnošt Večerka.

#### **Administration, Technical and Support Staff**

Marie Drábková, Eva Kapplerová, Eva Kirchnerová, Ludmila Ottová.

#### **Computing Centre:**

##### **Director:**

Ing. Petr Lampa.

##### **Staff:**

Helena Dupalová, Ing. Petr Gad'orek, Stella Habrdová, Iva Chytková, Karel Kappler,  
Ing. František Kreslík, Ing. Jiří Kuchta, Ing. Bohumil Michal, Milena Nečasová, Helena Pallova,  
Ing. Miloň Papežík, Dagmar Skalská, Zdeněk Zeman.

## **II. FACILITIES**

### **II.1 Teaching and Research Laboratories**

- Computer rooms with UNIX system
- Computer rooms with Personal computers
- Multimedia laboratories
- Computer hardware laboratory
- Computer peripheral laboratory
- CAD laboratory

## II.2. Special Instrumentation and Computers

- Workbenches with transputers T805
- Parallel system TN 110 with 4 transputers T9000
- Design system for Xilinx FPGAs
- Development system for boards with Motorola M68HC11
- Development system for microprocessors MC 68020, M68332 and signal processors DSP 5600
- Access to the university centre equipped with a supercomputer SGI POWER Challenge L

## III. TEACHING

### III.1. Undergraduate Study

Course name	Term	Hours (lec./lab.)	Lecturer
Programming and Usage of Computers	1	2/2	Doc. Ing. Jan Honzík, CSc.
Algorithms and Programming	2	3/2	RNDr. Jitka Kreslíková, CSc.
Programming Practice	2	0/2	RNDr. Jitka Kreslíková, CSc.
Software Engineering	3	3/2	Doc. Ing. Jaroslav Zendulka, CSc.
Algorithms and Data Structures	3	3/3	Doc. Ing. Jan Honzík, CSc.
Logic Systems	4	3/2	Ing. Miloš Eysselt, CSc.
Operating Systems 1	4	3/2	Dr. Ing. Petr Peringer
C and C++ Languages	4	3/2	Dr. Ing. Petr Peringer
Assembly Languages 1	4	2/2	Doc. Ing. František Zbořil, CSc.
Digital an Impulse Circuits	5	2/3	Ing. Josef Schwarz, CSc.
Data Modelling and Database Design	5	3/2	Doc. Ing. Jaroslav Zendulka, CSc.
Theoretical Computer Science 1	5	3/2	Doc. Ing. Milan Češka, CSc.
Computer Graphics Fundamentals	5	2/4	Prof. Ing. Ivo Serba, CSc.
Assembly Languages 2	5	2/2	Doc. Ing. František Zbořil, CSc.
Programming Languages	6	3/2	Doc. Ing. Tomáš Hruška, CSc.
Computer Organization. and Architecture	6	3/2	Ing. Vladimír Drábek, CSc.
Principles of Compiler Design	6	3/2	Dr. Ing. Miroslav Beneš
Advanced Computer Applications	6	2/3	Doc. Ing. Jiří Kunovský, CSc.
Software Architectures. and Components	6	3/2	Doc. Ing. Jan Honzík, CSc.
Peripheral Devices 1	6	3/2	Doc. Ing. Miroslav Linhart, CSc.
Modelling and Simulation	7	3/2	Doc. Ing. Zdena Rábová, CSc.
Term Project 1	7	0/2	Doc. Ing. Zdena Rábová, CSc.
Computability and Complexity	7	3/2	Ing. Vladimír Janoušek
Diagnosis and Safe Systems	7	3/2	Ing. Vladimír Drábek, CSc.
Functional and Logic Programming	7	3/2	Dr. Ing. Miroslav Beneš
Graphical User Interface	7	3/2	Ing. Petr Lampa
Programming of Gate Arrays	7	3/2	Ing. Otto Fučík
Computer Graphics	7	3/3	Prof. Ing. Ivo Serba, CSc.
Peripheral Devices 2	7	3/2	Doc. Ing. Miroslav Linhart, CSc.
Human - Machine Interface	7	2/3	Dr. Ing. Pavel Zemčík
Compiler Design	7	3/2	Doc. Ing. Tomáš Hruška, CSc.
Term Project 2	8	0/2	Doc. Ing. Zdena Rábová, CSc.
Data Communication	8	3/2	Doc. Ing. Miroslav Švéda, CSc.
Artificial Intelligence	8	3/2	Doc. Ing. František Zbořil, CSc.
Applied Microcomputers	8	2/3	Ing. Josef Schwarz, CSc.
Design Automation	8	2/3	Ing. Josef Schwarz, CSc.
Computer Security and Cryptography	8	2/3	Dr. Ing. Petr Hanáček
Synthesis of Digital Systems	8	3/2	Ing. Vladimír Drábek, CSc.
OO. Languages for Rapid Prototyping	8	3/2	Ing. Vladimír Janoušek
Applied Multiprocessor Systems	8	3/2	Prof. Ing. Václav Dvořák, DrSc.
Multimedia	8	2/3	Dr. Ing. Pavel Zemčík
Operating Systems 2	8	3/2	Ing. Petr Lampa
Digital Signal Processors	8	3/2	Ing. Otto Fučík

### III.2. Graduate Study - MSc level

Course name	Term	Hours (lec./lab.)	Lecturer
Advanced Computer Architecture	9	3/2	Prof. Ing. Václav Dvořák, DrSc.
Parallel and Distributed Algorithms	9	3/2	Dr. Ing. Petr Hanáček
Term Project 3	9	0/2	Doc. Ing. Zdena Rábová, CSc.
Information Systems Design	9	3/2	Doc. Ing. Tomáš Hruška, CSc.
Computer Communication. and Interfacing	9	3/2	Doc. Ing. Miroslav Švéda, CSc.
Neural Networks	9	2/2	Doc. Ing. František Zbořil, CSc.
Computer Networks	9	3/2	Doc. Ing. Miroslav Švéda, CSc.
Personal Comp.. - Technical. Maintenance	9	2/2	Ing. Zdeněk Kotásek, CSc.
Fault - Tolerant Systems	9	3/2	Ing. Vladimír Drábek, CSc.
Theoretical Computer Science 2	10	3/2	Doc. Ing. Milan Češka, CSc.
M.S. Thesis Project	10	0/10	Doc. Ing. Zdena Rábová, CSc.

### III.3. Courses courses for the Faculty of Arts

Course name	Term	Hours (lec./lab.)	Lecturer
Creative Computer Graphics 1	7	2/3	Prof. Ing. Ivo Serba, CSc.
Creative Computer Graphics 2	8	2/3	Prof. Ing. Ivo Serba, CSc.
Creative Computer Graphics 2	7	2/3	Prof. Ing. Ivo Serba, CSc.
Creative Computer Graphics 3	8	2/3	Prof. Ing. Ivo Serba, CSc.

### III.4. Graduate Study - PhD level

Course name	Hours (lec./lab.)	Lecturer
Modelling and Simulation	3/0	Doc. Ing. Zdena Rábová, CSc.
Computer Networks	3/0	Doc. Ing. Miroslav Švéda, CSc.
Fault - Tolerant Systems	3/0	Ing. Vladimír Drábek, CSc.
Real Time Systems	3/0	Doc. Ing. Miroslav Švéda, CSc.
Theory and Application of Petri nets	3/0	Doc. Ing. Milan Češka, CSc.
Theory of Programming Languages	3/0	Doc. Ing. Tomáš Hruška, CSc.
Artificial Intelligence and Neural Networks	3/0	Doc. Ing. František Zbořil, CSc.
Selected Topics from Database Systems	3/0	Doc. Ing. Jaroslav Zendulka, CSc.
Computer Graphics II	3/0	Prof. Ing. Ivo Serba, CSc.
Highly Exacting Computations	3/0	Doc. Ing. Jiří Kunovský, CSc.

### III.5. Study ( International Students) in English Language

Course name	Term	Hours (lec./lab.)	Lecturer
Programming and Computer Usage 1	1	2/2	Doc. Ing. Jiří Kunovský, CSc.
Algorithms and Programming	2	3/2	RNDr. Jitka Kreslíková CSc.
Programming Practise	2	0/2	Ing. Tomáš Bleša
Software Engineering	3	3/2	Doc. Ing. Jaroslav Zendulka, CSc.
Algorithms and Data Structures	3	3/3	Doc. Ing. Jan Honzík, CSc.
Assembly Languages 1	4	2/2	Doc. Ing. František Zbořil, CSc.
Logical Systems	4	3/2	Ing. Miloš Eysselet, CSc.
Operating Systems 1	4	3/2	Ing. Petr Příklad
Advanced Computer Science Courses	7	3/0	Doc. Ing. Milan Češka, CSc.
Applied Microprocessors	7	3/0	Ing. Josef Schwarz, CSc.
Hardware Architectures and Components	7	3/0	Prof. Ing. Václav Dvořák, CSc.
Data Modelling and Database Design	7	3/0	Doc. Ing. Jaroslav Zendulka, CSc.
Computer Communication and Interfacing	8	3/0	Doc. Ing. Miroslav Švéda, CSc.
Real Time Systems	8	3/0	Doc. Ing. Miroslav Švéda, CSc.
Software Architectures and Components	8	2/0	Doc. Ing. Jan Honzík, CSc.
Programming of Gate Arrays	9	3/0	Ing. Fučík
System Engineering Methods	9	3/0	Doc. Ing. Milan Češka, CSc.
Artificial Intelligence	9	3/0	Doc. Ing. František Zbořil, CSc.
Application-Specific Architectures	10	3/0	Prof. Ing. Václav Dvořák, CSc.

Design Automation	10	3/0	Ing. Josef Schwarz, CSc.
Diploma Project	10		Prof. Ing. Václav Dvořák, CSc.

## **IV. RESEARCH**

Projects the department co-ordinates:

Project name	Agency	Responsible person
Object-Oriented Database Model	GAČR	Doc. Ing. Tomáš Hruška, CSc.
Inheritance Modelling in an Object-Oriented Model	FRVŠ	Doc. Ing. Tomáš Hruška, CSc.
Object-Oriented Databases - Functional Semantic Data Model	FRVŠ	Ing. Dušan Kolář
Security of Information Systems	FRVŠ	Ing. Petr Hanáček
Parallel Methods of Fields Simulation and Solving	FRVŠ	Doc. Ing. Jiří Kunovský, CSc.
Flexible Digital Architectures	GAČR	Prof. Ing. Václav Dvořák, CSc.
Tools for Continuous Simulation of Spatial Dyn. Sys.	FRVŠ	Dr. Ing. Petr Peringer
Hypermedia Terminal of a Supercomputer	FRVŠ	Prof. Ing. Ivo Serba, CSc.
Engineering of Computer-Based Systems	FRVŠ	Doc Ing. Miroslav Švéda, CSc
Neural Associative Memories	FRVŠ	Doc. Ing. František Zbořil, CSc.

Projects in which the department participates:

Project name	Agency	Responsible person
Campus Network of the Technicka Campus	INFRA	Ing. Lampa
Stimulation of European Industry through High Performance. Computing	Copernicus	Prof. Ing. Václav Dvořák, CSc.
Students mobility	TEMPUS	Doc. Ing. Zdena Rábová, CSc.
Design of Parallel Textbases	MŠMT (KONTAKT)	Doc. Ing. Jaroslav Zendulka, CSc.

## **V. COOPERATIONS**

### **V.1. Cooperations in Czech Republic**

- AFOI - Association of firms for security of information
- Alcor Moravia Devices Ltd., Zlin,
- Bank Academy, Prague
- Beta Control Ltd., Brno,
- Camea Ltd., Brno,
- Comimpex Comp., Brno
- Dicom Ltd., Uherske Hradiste,
- IBM Czech Republic, Prague,
- VEMA - Computers and Design Ltd., Brno,
- Brno Town Council, Department of Territorial Planning, Department of the Town information System,
- Metra Blansko Comp., Blansko
- Microsoft Ltd., Prague,
- Monet+, Zlin
- Motorola Ltd., Czech Republic, European Semiconductor Group, Prague
- MP-SOFT Brno,
- Ramet Ltd., Uherske Hradiste,
- SPT Telecom Company, Praha,
- Biomatematical Laboratory of the Entomology Institute of the Academy of Science CR, Ceske Budejovice,
- Faculty of Computer Science, Masaryk University, Brno,
- Department of Computer Science, Faculty of Electrical Engineering and Computer Science, TU Ostrava,
- Department of Mathematical Informatics, Faculty of Sciences, Palacky University, Olomouc,
- Department of Mathematics, Faculty of Pedagogy, University of Ostrava,
- Department of Operational and System Analysis, University of Agriculture, Brno,

- Department of Computer Integrated Manufacturing, Faculty of Applied Sciences, University of Plzen,
- Department of Computers, Faculty of Electrical Engineering, CVUT Prague,
- Masaryk Oncology Institute Brno,

## V.2. International Cooperation

- Applied Dynamics International Ltd., Wellingborough , UK,
- Boeing North American, USA,
- DWL Electronische Systeme, GmbH, Germany,
- Neuroth Electroinic Components-Engineering Wien, Austria,
- IMAG-LGI, Grenoble, France,
- Parsytec, GmbH, Chemnitz, Germany,
- Rapid Data Ltd., UK,
- Rolls-Royce Military Aero Engines Ltd., UK,
- RTC Athlone, Ireland,
- RTC (Regional Technical College) Sligo, Ireland,
- Centre for Vision, Speech, and Signal Processing (CVSSP), University of Surrey, Guildford, UK,
- Department of Computer Science, Merchant Venturers' Building, University of Bristol, UK,
- Department of Electrical and Electronic Engineering, University of Bristol, Merchant Venturers Building, University of Bristol, UK,
- Department of Information Technology, Lappeenranta University of Technology, Lappeenranta, Finland,
- Dep. de Engenharias, Univesidade de Trans-os-Montes e Alto Douro, Vila Real, Portugal,
- Department of System Science and Industrial Engineering, State University of New York, New York, USA,
- Department of Informatics, Aristotle University of Thessaloniki, Soluò, Greece,
- Information Processing Group, Lappeenranta University of Technology, Lappeenranta, Finland,
- Institute of Computer Graphics, Vienna University of Technology, Karlsplatz, Vienna, Austria,
- Institute of Control and System Engineering, Technical University of Wroclaw, Wroclaw, Poland,
- Institute National Polytechnique de Grenoble, Laboratoire d'Automatique de Grenoble-Ensieg, France,
- Institute of System Science, Johannes Kepler University Linz, Linz, Austria,
- Department of Computer Graphics, Komensky University, Bratislava, Slovak Republic,
- KFKI - MSZKI, Budapest, Hungary,
- NCEA (National Council for Educational Awards), Dublin, Ireland,
- Slovak Academy of Science, Bratislava, Slovak Republic,
- Technical university of Gdansk, Gdansk, Poland,
- The International Institute for General System Science, Southwest Texas State University, San Marcos, Texas, USA,
- Universidade Nova de Lisboa, Lisabon, Portugal,
- Universitat Autònoma de Barcelona, Barcelona, Spain,
- Université Paul Sabatier, Toulouse, France,
- University of Lingby, Denmark,
- University of Michigan, USA
- University of Miskolc, Miskolc, Hungary,
- University of Vienna, Austria,
- University of Waikato, Hamilton, New Zealand,
- University of Westminster, UK,
- University of Wyoming, Laramie, USA,
- Department of Computer Science and Engineering, Technical University of Bratislava, Slovak Republic,
- Department of Computer Science and Engineering, Technical University of Kosice, Slovak Republic.

### V.2.1. Visitors to the Department

- Prof. George J.Klir, Dept.of System Science and Industrial Engineering, State University of New Yourk, Binghamton, USA - 3 days,
- Dr. Yannis Manolopoulos, Department of Informatics, Aristotle University of Thessaloniki, Thessaloniki, Greece - 4 days,

- Dimitris Dervos, Department of Informatics, Aristotle University of Thessaloniki, Thessaloniki, Greece - 4 days,
- Dr. Alan Chalmers, University of Bristol, Velká Británie, 1 week,
- Dr. Heikki Kalviainen, Lappeenranta University of Technology, Finland, 1 week.

### V.2.2. Visits of Staff Members to Foreign Institutions

- Doc. RNDr. Milan Ěeška, CSc. - LAG, Institut Nation Polytechnique de Grenoble, France - 1 week,
- Dr. Ing. Pavel Zemèik, - University of Bristol, UK, 10 days,
- Dr. Ing. Pavel Zemèik - University of Surrey, Guildford, UK, 1 week,
- Dr. Ing. Pavel Zemèik - Lappeenranta University of Technology, Finland, 1 and 1/2 month.

### V.3. Membership in International Organizations and Societies

Person	Organization
Dr. Ing. Miroslav Beneš	ACM, Czech and Slovak Simulation Society (as part of EUROSIM)
Doc. RNDr. Milan Ěeška, CSc.	ACM, TC10 IFIP, WG 10.1, Gesellschaft fur Informatik , Czech and Slovak Simulation Society (as part of EUROSIM)
Ing. Vladimír Drábek, CSc.	Czech and Slovak Simulation Society (as part of EUROSIM)
Prof. Ing. Václav Dvořák, Dr.Sc.	IEEE Computer Society
Ing. Miloš Eysselt, CSc.	Czech and Slovak Simulation Society (as part of EUROSIM), IGIP (International e Gesellschaft fur Ingenieurpadagogik)
Dr. Ing. Petr Hanáček	ACM, Czech and Slovak Simulation Society (as part of EUROSIM)
Doc. Ing. Jan Honzík, CSc.	T.E.X.T. (Trans European Exchange and Transfer Consortium), IGIP (International e Gesellschaft fur Ingenieurpadagogik)
Doc. Ing. Tomáš Hruška, CSc.	ACM, IFIP, WG 10.1, Czech and Slovak Simulation Society (as part of EUROSIM)
Ing. Vladimír Janoušek	Czech and Slovak Simulation Society (as part of EUROSIM)
Ing. Dušan Kolář	Czech and Slovak Simulation Society (as part of EUROSIM)
Doc. Ing. Jiří Kunovský, CSc.	Czech and Slovak Simulation Society (as part of EUROSIM)
Dr. Ing. Petr Peringer	Czech and Slovak Simulation Society (as part of EUROSIM)
Ing. Petr Pøikryl	Czech and Slovak Simulation Society (as part of EUROSIM)
Doc. Ing. Zdena Rábová, CSc.	Czech and Slovak Simulation Society (as part of EUROSIM)
Prof. Ing. Ivo Serba, CSc.	Czech and Slovak Simulation Society (as part of EUROSIM)
Ing. Josef Schwarz, CSc.	Czech and Slovak Simulation Society (as part of EUROSIM)
Doc. Ing. Miroslav Švéda, CSc.	IEEE Computer Society, TC Engineering of Computer-Based Systems, Euromicro Association, IFIP WG 10.1, Czech and Slovak Simulation Society (as part of EUROSIM)
Doc. Ing. František Zbořil, CSc.	Czech and Slovak Simulation Society (as part of EUROSIM)
Doc. Ing. Jaroslav Zendulka, CSc.	ACM, Czech and Slovak Simulation Society (as part of EUROSIM)

## VI. PUBLICATIONS

### VI.1. Journals

- Blatný J., Kotásek Z., Hlavička J.: RT Level Test Scheduling, Computers and Artificial Intelligence, Vol. 16, 1997, č. 1, pp. 13-29.
- Dvorak V.: Bounds on Size of Decision Diagrams. Journal of Universal Computer Science (JUCS), Vol. 3, 1997, No. 1, ISBN 3-540-62047-8, pp. 2-22.
- Dvorak V., Schwarz J.: Crosstalk analysis in multiconductor interconnect systems. Journal of Electrical Engineering (), Vol. 48, 1997, No. 1-2, ISSN 0013-578X, pp. 12-17.

- Honzík J.M.: Development of Curricula in Technical Universities, Quality Evaluation and Control of Learnt Knowledge. In: Melezinek A., Kiss I.: Education by Communication, Proceedings of IGIP World Congress Conference, Wien-Budapest, 1996, ISSN 0724-8873, ISBN 3-88064-266-4, s. 385-390.
- Honzík J.M.: The role of Algorithms and Data Structures in the Curricula for Engineering Education. In: Melezinek A.: Proceedings of IGIP 26<sup>th</sup> International Symposiums: Ingenieur 2000, Klagenfurt, Austria, 1997, ISSN 0724-887, ISBN 3-88064-273-73, s. 79-82.
- Švéda M.: Design Method, Fail-Stop Safety Model, and Embedded Application. Journal of Systems Architecture, Vol. 43, No. 1-5, March 1997, ISSN 1383-7621/0165-6074, pp. 47-57.

## VI.2. Conferences

- Beneš M.: Type Systems in Object-Oriented Model. Proceedings of 31<sup>st</sup> International Conference MOSIS-97, MARQ, Ostrava, 1997, ISBN 80-85988-16-X, pp. 104-109.
- Beneš M., Hruška T.: Modelling Objects with Changing Roles, Proceedings of 23<sup>rd</sup> ASU Conference, Stara Lesna, ASU+VSZ Informatika, Košice, 1997, pp. 188-195.
- Beneš M., Hruška T.: Layout of Objects in Object-Oriented Database System, DATASEM-97, CS-COMPLEX, Brno, 1997, pp. 90-96.
- Cigánek P., Drábek V.: Synthesis and Modelling of Binary Cellular Automata, Int. Conf. on DDECS-97, May 12-16, Solan, 1997, ISBN 80-85988-19-4, pp. 79-84.
- Cigánek P., Drábek V.: Applications of Binary Cellular Automata in BIST, First Electronic Circuits and Systems Conference, ECS-97, Sept. 4-5, Bratislava, Slovakia, pp. 189-192.
- Češka M., Janoušek V.: A formal Model for Object Oriented Petri Nets Modelling, Advances in System Science and Applications (1997), Special Issue 1-6, International Institute for System Studies, SW Texas State University 1997 (ISSN 1078-6236), pp. 119-124.
- Češka M., Janoušek V., Vojnar T.: PNTalk - a Computerized Tool for Object Oriented Petri Nets Modelling, Proc. of EUROCAST-97, CIICC Universidad de Las Palmas de Gran Canaria, pp. 229-231.
- Češka M.: Some Comments on Application of Theory of Formal Languages in System Science, In: Proc. of 31<sup>st</sup> International Conference MOSIS 97, Vydavatelství MARQ, Ostrava 1997, pp. 98-103.
- Češka M., Janoušek V., Vojnar T.: PNTalk - Language and System Based on Object Oriented Petri Nets, Proc. of International conference on application and theory of Petri Nets, Toulouse 1997, Tool demonstrations, 2 pages
- Drábek V.: Modelling of Evolvable Hardware, 31<sup>st</sup> Spring Int. Conf. MOSIS-97, April 28-30, Hradec nad Moravicí, 1997, ISBN 80-85988-18-6, Vol. 3, pp. 319-324.
- Drábek V.: Modelling of Two-Dimensional Cellular Automata, XIX. Int. Workshop ASIS 1997, Krnov, 16-18.9.1997, ISBN 80-85988-21-8, pp. 109-114.
- Dvorak V.: Evaluating embedded parallel applications in TRANSIM. Proceedings of the 3<sup>rd</sup> Internat. Conference on Soft Computing MENDEL-97, PC-DIR, Brno, 1997, pp. 44-49.
- Eysselt M.: The Design of The Factored TANT and TONT Networks. In: Proceedings of Conference MOSIS-97, April 1997, Hradec nad Moravicí, ISBN 80-85988-17-8, pp. 177-182.
- Eysselt M.: A covering of the Boolean Functions. In: Proceedings of the XIXth Workshop "Advanced Simulation of Systems", Krnov, 16.-18.9.1997, ISBN 80-85988-20-8, pp. 103-108.
- Habáň R., Švéda M.: Formal Specifications for Higher-Level Microsystems Design: A Case Study. Abstract Proc. IFIP Workshop on Modelling of Microsystems: Methods, Tools and Examples, University of Stirling, Scotland, 1997, pp. 1.3:1-2.
- Hanáček P., Rábová Z.: Risk Analysis Model of Information System, Proceedings of Conference MOSIS-97, April 1997, Hradec nad Moravicí, ISBN 80-85988-17-8, pp. 169-174.
- Hanáček P., Rábová Z.: Processing of Input Data for Risk Analysis, Proceedings of Conference ASIS-97, September 1997, Krnov, pp. 91-96.
- Hruška T., Kolenčík P.: Extending an Object-Oriented Model: Multiple Class Objects, in: Lecture Notes in Computer Science 1997, Springer Verlag 1997.
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### **VI.3. Textbooks, Lecture Notes**

- Dvořák V.: Architectures of computers.. PC-DIR, Brno, 1997, 76 pages (in English).

### **VI.4. Books**

- Berka M., Macur J., Hanáček P.: WWW information servers, UNIS Edition Brno 1997, 158 pages (in Czech).

## **VII. OTHER ACTIVITIES**

- Co-operation in organization of the annual student workshop Central European Seminar on Computer Graphics,
- Annual organization of the faculty student technical competition in Computer Science and Engineering.