



## Curriculum Vitae

## PERSONAL INFORMATION



Cristian Andy Tănase

"Ștefan cel Mare" University of Suceava



Sex M | Date of birth 04/02/1974 | Nationality Romanian

## POSITION WITHIN THE PROJECT

Researcher, scientific research team member

## EXPERIENȚA PROFESIONALĂ

10.1998-10.2004

Assistant lecturer

"Ștefan cel Mare" University of Suceava, Faculty of Electrical Engineering and Computer Science

10.2004-prezent

▪ VLSI Digital Design, Digital Signal Processing, Parallel Computing Architectures

Lecturer

"Ștefan cel Mare" University of Suceava, Faculty of Electrical Engineering and Computer Science

01.1999-10.2001

▪ VLSI Digital Design, Digital Signal Processing, Parallel Computing Architectures

Hardware Engineer

ADVANCED CONTRACT ELECTRONICS S.R.L. (Fontane ACM Group Germany)

11.2001-12.2002

▪ Electronic Systems Developing

Software Engineer

ISRATECH S.R.L Suceava, Romania

12.2011-09.2014

▪ VLSI Digital Design

Software Engineer

SILICON SERVICE, Iasi, Romania (AMD Inc. USA Contractor)

▪ SOC (Systems on Chip) Design and Verification

## EDUCATION AND TRAINING

10.1992-06.1998

Bachelor studies in Computers and Systems Science

"Ștefan cel Mare" University of Suceava, Faculty of Electrical Engineering and Computer Science

10.1999-06.2000

Master Studies - Intelligent systems for process control

"Ștefan cel Mare" University of Suceava, Faculty of Electrical Engineering and Computer Science

10.2001-09.2008

PhD degree "CONTRIBUTIONS TO THE DEVELOPMENT OF COMPUTER AIDED DESIGN TECHNIQUES OF INTEGRATED STRUCTURES", Domain - Electronics and Telecommunications Engineering

"Ștefan cel Mare" University of Suceava, Faculty of Electrical Engineering and Computer Science

10.2004-02.2009

Bachelor studies in Accounting and IT management

"Ștefan cel Mare" University of SUCEAVA, Faculty of Economic Sciences and Public Administration

10.2010-02.2013

Post-doctoral research "Research in the field of parallel algorithms in solving the problem of searching for a moving target in a dynamic environment" – implementing the parallel algorithms on the PlayStation3 cluster or RoadRunner cluster systems based on Cell architecture



## Curriculum Vitae

“Ștefan cel Mare” University of Suceava, Faculty of Electrical Engineering and Computer Science

## PERSONAL SKILLS

Mother tongue(s)

Română

Other language(s)

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B1	B1	B1	B1	B1
A1	A1	A1	A1	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Communication skills

- good communication skills gained through my experience as teacher at the University "Ștefan cel Mare" of Suceava

Organisational / managerial skills

- graduation of “Project Management for competitive research” course in 2006

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

- Digital Signal Processing (Software and Hardware development Tools from Analog Devices – ADSP2181, ADSP BF535)
- SoC-HDL Designing, Synthesis and Verification (Verilog, VHDL, ISE Design, ModelSim, UVM – Spartan and Virtex family)
  - Xilinx FPGA programming platforms;
  - Vivado, Vivado HLS, Xilinx SDK, Xilinx System Generator MATLAB/Simulink tools;
  - Verilog, VHDL (beginner), SystemC (including synthesizable version) languages;
- Embedded Systems Programming and Design
- High Level Programming (C, C++, Visual C, Python)
- Low Level Programming ( x86, ARM, MIPS Assembling)
- PCB Designing (Orcad, Protel, Altium Designer)
- Real Time and Parallel Programming (Cell BE Programming)

Driving licence

B

## ADDITIONAL INFORMATION

Publications

## ISI Papers

1. Tanase, CA; Graur, A; Gaitan, VG, Popa V - Autonomous Mobile Device Controlled by On-chip Network of Intelligent Sensors for Indoor Environment Navigation - ELEKTRONIKA IR ELEKTROTEHNIKA Issue: 5 Pages: 77-82 Published: 2009 – ISSN 1392-1215, IF 0.439



## Curriculum Vitae

2. Tanase, CA; Vatavu, RD; Pentiu, SG; Graur A - Detecting and Tracking Multiple Users in the Proximity of Interactive Tabletops - ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING Volume: 8 Issue: 2 Pages: 61-64 Published: 2008 – ISSN 1582-7445
3. Cristian Andy Tanase, Vasile Gheorghita Gaitan - Dynamic, unbalanced distribution of tasks on a PS3 cluster system for double precision calculation - The Journal of Supercomputing, Springer Netherlands, Volume 62, Issue 3, pp:1502-1518, December 2012, IF: 0.917, SRI: 0.54839
4. Cristian Andy TANASE, Vasile Gheorghita GAITAN - Threads Pipelining on the CellBE systems - Advances in Electrical and Computer Engineering, Volume: 13 Issue: 3 Pages: 121-126 Published: 2013 – ISSN 1582-7445, IF- 0.555

**BDI Papers**

1. Cristian Andy Tanase, Stefan Gheorghe Pentiu, Adrian Graur - ON-CHIP NETWORK OF INTELLIGENT SENSORS FOR CONTROLLING A MOBILE ROBOT IN AN ENVIRONMENT WITH OBSTACLES- The Ninth International Conference on Multimodal Interfaces (ICMI 2007) November 12-15, 2007- Nagoya, Japan, ISSB/ISBN: ACM 978-1-59593-869-5, pp: 51-54

**Books**

1. Andy Tănase, Vasile Găitan - Family of Processors for the Digital Signal Processing. Editura Matrix, București 2002. ISBN 973-685-356-X
2. Vasile Gheorghită Găitan, Valentin Popa, Andy Cristian Tănase – Local Industrial Network Architecture. Editura Matrix, București 2004. ISBN 973-685-849-9
3. Andy Cristian Tănase –Digital Signal Processing Systems Programming. Editura Universității Ștefan cel Mare Suceava 2010. ISBN 978-973-666-331-4

## Conferences

1. Radu-Daniel VATAVU, Cristian Andy TĂNASE, Ștefan-Gheorghe PENTIUC, and Adrian GRAUR - Tracking Users around Tabletops - Volumul SISTEME DISTRIBUITE, Editura Universității din Suceava - Decembrie 2008
2. Cristian Andy Tanase, Adrian Graur, Andrei Leonte, Dorin Palanciu, George Holca – Autonomous system for searching and eliminating fire sources, ADVANCED IN ELECTRICAL AND COMPUTER ENGINEERING – Anul 2005. Nr.1 – Secțiunea Electrică. PP 96-100, ISSN 1582-7445
3. Cristian Andy Tanase, Stefan Gheorghe Pentiu, Adrian Graur - ON-CHIP NETWORK OF INTELLIGENT SENSORS FOR CONTROLLING A MOBILE ROBOT IN AN ENVIRONMENT WITH OBSTACLES- The Ninth International Conference on Multimodal Interfaces (ICMI 2007) November 12-15, 2007- Nagoya, Japan
4. Cristian Andy Tănase, Aurel Chirap - Controlling a Mobile Robot in Indoor Environment with On-Chip Network of Intelligent Sensors - International Conference on Development and Application Systems 2008
5. Cristian Andy Tanase, Vasile Gheorghita Gaitan - The determination of a balancing algorithm for architectures based on asymmetrical Cell BE processors - The 3rd World Conference on Information Technology (WCIT-2012), Barcelona, Spain. 15-Noiembrie 2012
6. Tanase, Cristian Andy - An approach of MPRA technique over ARM cache architecture - 13th International Conference on Development and Application Systems (DAS) Suceava, ROMANIA, Pages: 86-90, 2016

## Projects

**PNCDI**

1. DATA ACQUISITION SYSTEM USING WIRELESS TYPE FREQUENCY 2.4 GHZ FOR EXTENSIVE AREAS – RELANSIN –PNCDI (2004) – Research engineer



## Curriculum Vitae

2. INTEGRATION OF RFID INNOVATIVE APPLICATIONS IN A WEB B2B PLATFORM FORM FOR ENTERPRISE SUPPLY NETWORKS - RASMEN (2005-2008) - Research engineer
3. INTEGRATED MANAGEMENT OF INFORMATION AND PROCESSES AT ENTERPRISE LEVEL BASED ON PASSIVE TRANSPONDERS (2006-2009) - Research engineer
4. GESTURES INTERACTION OF INFORMATION SYSTEMS AND ROBOTICS – INTEROB (2006-2009) - Research engineer
5. SYSTEM FOR CUSTOMIZED THERAPY DISORDERS OF SPEECH LANGUAGE – TERAPERS (2006-2009) - Research engineer
6. DEVICES WITH METASTRUCTURES FOR COMPLEX PROCESSING OF RADIO SIGNALS IN SATELLITE AND MOBILE COMMUNICATIONS NETWORKS – METAPRO (2006-2009) - RESEARCH ENGINEER
7. CONTRIBUTIONS TO DEVELOPMENT OF COMPUTER AIDED DESIGN TECHNIQUES OF INTEGRATED STRUCTURES – CNC SIS (2007-2008) - Project Manager
8. GRID APPLICATION DEVELOPMENT OF PATTERN RECOGNITION AND ARTIFICIAL INTELLIGENCE DISTRIBUTED - GRIDNORD (2007-2010) - Research engineer
9. METROPOLITAN HETEROGENEOUS SYSTEM FOR DATA MONITORING OF SPECIFIC UTILITIES CONSUMPTION (2007-2010) - Research engineer

**Alte proiecte**

1. CC ENGINE CONTROL USING A SURVEY SYSTEM BUILT ON A UP ADSP-2181 - ISEP PORTO, PORTUGAL, TEMPUS FRAMEWORK – 1996
2. VOCAL RECOGNITION SYSTEM USING MATLAB DEVELOPING TOOLS - UNIVERSITY OF CATANIA ITALY -1997
3. INTERNET PROGRAMMING USING PHP LANGUAGE AND MYSQL DATABASE - UNIVERSITY OF LIMERICK IRELAND -1998
4. VOCAL COMMAND OF AN ADSP-2181 EZ-LAB SYSTEM – THEME OF THE HARD&SOFT INTERNATIONAL CONTEST, 5TH EDITION, ORGANISED BY THE ELECTRICAL ENGINEERING FACULTY -1998
5. FINAL THESIS WITH THE THEME “CC ENGINE CONTROL USING A MMC-330 SYSTEM ON AN ADSP-2171 ARCHITECTURE – 1998
6. AC TIMER – 500 SERIES - BENEFICIARY: ADVANCED CONTRACT ELECTRONICS S.R.L. (FONTANE ACM GROUP GERMANY)
7. 433 MHZ DIGITAL BABYGUARD – PART B. BENEFICIARY: ADVANCED CONTRACT ELECTRONICS S.R.L. (FONTANE ACM GROUP GERMANY)
8. VITERBI CO-DEC SYSTEM FOR AN EZ KIT ADSP-2189 - BENEFICIARY: ISRATECH S.R.L. SUCEAVA – 2002
9. SOFTWARE DEVELOPING TOOLS (ASSEMBLER / LINKER) FOR UC PIC 16C54 - BENEFICIARY: ISRATECH S.R.L. SUCEAVA – 2002
10. LCD EQUIPMENT FOR RECORDING AND STORAGE OF QUANTITIES OF PROCESS - BENEFICIARY: CAOM S.A. PASCANI – 2004
11. RESEARCH ON DEVELOPING A SOFTWARE TOOL DEDICATED TO THE DESIGN OF GAS PIPELINES OF LOW PRESSURE - BENEFICIARY: S.C. INVEST S.R.L. – 2005
12. BASILISK, KAVERI, AMUR PROJECTS - BENEFICIARY: AMD INC. USA - 2014

## Honours and awards

1. VATAVU RADU-DANIEL, TANASE ANDY-CRISTIAN, PENTIUC STEFAN-GHEORGHE, GRAUR ADRIAN (2009), OUTCOMES RESEARCH AWARD - CNC SIS - PREMIEREA REZULTATELOR, CNC SIS-CONSILIUL NATIONAL AL CERCETARII STIINTIFICE DIN INVATAMANTUL SUPERIOR



## ISI Citations

1. Intensive computing on a large data volume with a short-vector single instruction multiple data processor, Ungurean, Ioan; Gaitan, Vasile-Gheorghita; Gaitan, Nicoleta-Cristina, IET COMPUTERS AND DIGITAL TECHNIQUES Volume: 8 Issue: 5 Pages: 219-228 Published: SEP 2014  
Cited paper:  
Threads Pipelining on the CellBE Systems, Tanase, Cristian Andy; Gaitan, Vasile Gheorghita, ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, Volume: 13, Issue: 3, Pages: 121-126, Published: 2013
2. RCSoS: An IEC 61508 Compatible Server Model for Reliable Communication, Zhou, Rui; Chen, Xiaolong; Chen, Huaming; et al., JOURNAL OF SIGNAL PROCESSING SYSTEMS FOR SIGNAL IMAGE AND VIDEO TECHNOLOGY, Volume: 80, Issue: 3, Pages: 323-337, Published: SEP 2015
3. Intensive computing on a large data volume with a short-vector single instruction multiple data processor, Ungurean, Ioan; Gaitan, Vasile-Gheorghita; Gaitan, Nicoleta-Cristina, IET COMPUTERS AND DIGITAL TECHNIQUES, Volume: 8, Issue: 5, Pages: 219-228, Published: SEP 2014
4. A Server Model for Reliable Communication on Cell/BE, Zhou, Rui; Chen, Huaming; Liu, Qun; et al., Book Group Author(s): IEEE Conference: 42nd Annual International Conference on Parallel Processing (ICPP) Location: Ecole Normale Supérieure Lyon, Lyon, FRANCE Date: OCT 01-04, 2013 Sponsor(s): INRIA; LIP Lab; Univ Lyon, MILYON; IEEE Comp Soc 2013 42ND ANNUAL INTERNATIONAL CONFERENCE ON PARALLEL PROCESSING (ICPP) Book Series: Proceedings of the International Conference on Parallel Processing Pages: 1020-1027 Published: 2013  
Cited paper:  
Dynamic, unbalanced distribution of tasks on a PS3 cluster system for double precision calculation, Tanase, Cristian Andy; Gaitan, Vasile Gheorghita, JOURNAL OF SUPERCOMPUTING, Volume: 62, Issue: 3, Pages: 1502-1518, Published: DEC 2012
5. Evaluating heuristics for tabletop user segmentation based on simultaneous interaction, Garcia-Sanjuan, Fernando; Jaen, Javier; Catala, Alejandro, EXPERT SYSTEMS WITH APPLICATIONS, Volume: 40, Issue: 14, Pages: 5578-5587, Published: OCT 15 2013
6. Presence bubbles: supporting and enhancing human-human interaction with ambient media, Vatavu, Radu-Daniel, MULTIMEDIA TOOLS AND APPLICATIONS, Volume: 58, Issue: 2, Pages: 371-383, Published: MAY 2012  
Cited paper:  
Detecting and Tracking Multiple Users in the Proximity of Interactive Tabletops, Tanase, Cristian Andy; Vatavu, Radu-Daniel; Pentiu, Stefan-Gheorghe; Gaur Adrian, ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, Volume: 8, Issue: 2, Pages: 61-64, Published: 2008