# **CURICULLUM VITAE**

#### Personal details:

Name: RĂZVAN TUDOR V. TĂNASIE
 Birth: December 3<sup>rd</sup>, 1980 - Craiova, Romania

Social status: marriedSex: male

❖ Address: Str. Imparatul Traian nr. 44 (66)

Craiova, Dolj, 1100 – Romania Mobile phone: +40 – 729 - 008009 Home phone: +40 - 351 - 802896 E-mail: razvan.tanasie@software.ucv.ro

## **Current status:**

❖ Assistant professor - Software Engineering department, Faculty of Automation, Computers and Electronics, University of Craiova, Romania,

❖ Ph.D. student - "Automated Systems" field.

# **Education:**

❖ 2006: Master in Software Engineering, Faculty of Automation, Computers and

Electronics, University of Craiova, Romania, Master Diploma Project - 10,

years of study average -10,

❖ 2004: BSc in Computer science, Faculty of Automation, Computers and Electronics,

University of Craiova, Romania, Software Engineering, English teaching class, Diploma average – 10, years of study average – 9.79, first in the year,

❖ 2003: 3 months D.A.A.D. – I.A.E.S.T.E. program - scholarship in Germany at

"Universitat der Bundeswehr Munchen",

❖ 2002: 3 months Socrates scholarship in Germany at "Universitat der Bundeswehr

Munchen",

♦ 1999: high – school graduation, GPA 9.62 on the scale of 1 to 10,

❖ 1995 – 1999: high – school - college "Carol I", intensive mathematics and English

schedule.

## Prizes and awards:

❖ 2008 I organize and coordinate ACE-UBISOFT Craiova Gaming Center – a

gaming training center (programming, graphics, design) that more than 400

people attend,

❖ 2008 I organized and coordinated the graphical interest group, whose members

participated at national and international contests (ITFEST, 4Tuning Days,

ZTS) where they obtained more than 20 awards,

Nr.	Concurs	Premiul
4	4T . D	rst p · AT · D D · AD · A
1.	4Tuning Days	Ist Prize - 4Tuning Days Best 3D - Marius
		Vintila
2.	IT Fest Timisoara	I <sup>st</sup> Prize - Hardware - Daniel Ianosi I <sup>st</sup> Prize - Soft Utilitar - Mihai Gosa, Marius Vintila, Ovidiu Blejdea, Mihai Popescu, Sorin Ilie II <sup>nd</sup> Prize - Soft Educational - George Stan II <sup>nd</sup> Prize - Fotografie - Mihai Sandu II <sup>nd</sup> Prize - Video - Gabriel Popescu

	IT Fest	Bucuresti	I <sup>st</sup> Prize - Multimedia - Marius Vintila, Roxana
3.			Cojocaru
			III <sup>rd</sup> Prize - Multimedia - Gabriel Popescu
			II <sup>nd</sup> Prize - Soft Educational - George Stan
			II <sup>nd</sup> Prize - Soft Utilitar - Mihai Gosa, Marius
			Vintila, Ovidiu Blejdea, Mihai Popescu, Sorin
			Ilie
4.	ZTS Craiova		I <sup>st</sup> Prize - Multimedia - Marius Vintila, Roxana
			Cojocaru
			II <sup>nd</sup> Prize - Multimedia - Gabriel Popescu
			III <sup>rd</sup> Prize - Multimedia - Daniel Ianosi
			I <sup>st</sup> Prize - IT - Mihai Popescu
			III <sup>rd</sup> Prize - IT - Mihai Gosa, Marius Vintila,
			Ovidiu Blejdea, Mihai Popescu, Sorin Ilie

❖ 2007: I organized and coordinated the graphical interest group, whose members participated at national and international contests (ITFEST, STUDIT, ZTS) where they obtained more than 20 awards,

No	Contest	Prize
1.	ITFest 2007 Timisoara	First Prize Games; First Prize Interactive
		Contest; IV Prize Interactive Contest; The
		Special Prize for The Best Team in Contest.
		First Prize – Multimedia Section; II Prize –
2.	ZTS Craiova	Multimedia Section; III <sup>rd</sup> Prize – Multimedia
		Section; Special Prize – Multimedia Section;
		first Prize – IT Section; II Prize – IT Section.
		First Prize – 3D Graphics Section; II Prize – 3D
3.		Graphics Section; III <sup>rd</sup> Prize – 3D Graphics
	IT Fest Bucharest	Section; First Prize – Games Section; First Prize
		– Spot Design; III <sup>rd</sup> Prize – Special Soft Section;
		III <sup>rd</sup> Prize Web Design Section.
4.	Stud IT Timisoara	First Prize; Second Prize; Mention.

*	2005:	I coordinated the "digitalReality" team, the only Romanian team that qualified in the Rendering section of the semifinals of the "Microsoft Imagine Cup 2005" contest – first 24 teams in the world,
*	1999:	· · · · · · · · · · · · · · · · · · ·
		3 <sup>rd</sup> prize at the "National Mathematics Contest",
**	1998:	participation at the "National Mathematics Contest",
**	1997:	3 <sup>rd</sup> prize at the "National Mathematics Contest",
**	1996:	2 <sup>nd</sup> prize at the "National Mathematics Contest",
*	1995:	participation at the "National Mathematics Contest",
*	1994:	1 <sup>st</sup> prize at the "National Mathematics Contest".

# Main studied disciplines:

- ❖ Pascal, C/C++ Programming Languages,
- Programming Techniques,
- Data Structures and Algorithms,
- ❖ Object Oriented Programming Microsoft Visual C++,
- Computer Graphics,
- ❖ Graphics Processing Systems DirectX, OpenGL,

- ❖ Document Processing HTML, Microsoft Office,
- Logical Design of Digital Computer,
- ❖ Computer Architecture and Computer Organization,
- **❖** Assembly Language Programming,
- Database Designing and Programming,
- ❖ Computer Networks,
- ❖ Modeling and Simulation for Computer Systems and Networks,
- Formal Languages,
- Expert Systems,
- \* Real Time Computer Systems,
- ❖ Web Application Development JAVA, PHP, ASP,
- Operating Systems,
- Multimedia,
- ❖ Parallel Computer Programming,
- Compiler Design,
- **&** E-Commerce.

# **Approached projects:**

- ❖ Simulation and visual-servoing control graphic environment for hyper-redundant robots kinematics and dynamics applications ((implemented in Microsoft Visual C++ and using Microsoft DirectX 9 libraries),
- ❖ GeDeE Generator, derivator and evaluator for expressions (implemented in Microsoft Visual C++).
- ❖ Graphics and Physics Engines for Force Simulation in a Virtual Environment (implemented in Microsoft Visual C++ and using Microsoft DirectX 9 libraries),
- ❖ Human Movement Simulator (implemented in Microsoft Visual C++ and using Microsoft DirectX 9 libraries),
- ❖ Kinematics Robot Control Using Visual Servoing (implemented in Microsoft Visual C++),
- ❖ Path Finding System Using Artificial Potential Fields (implemented in Microsoft Visual C++ and using Microsoft DirectX 9 libraries),
- ❖ Fuzzy System for Image Processing FUZIP (implemented in Microsoft Visual C++),
- ❖ Server Side Solutions for Applications on the Web with Database Support a site for the students of all universities implemented in PHP and MySQL,
- Client Side Solutions for Applications on the Web with Database Support operations on a CD collection implemented in JAVA with MySQL,
- ❖ Mathematical methods based on differential equations for solving heat transfer problems. Application for Round and Flat Cables. Implemented in Visual C++ at UniBw Munchen under the co-ordination of Prof. Dr. Ing. H. D. Liess,
- ❖ Mathematical methods based on differential equations for solving heat transfer problems. Application for Fuses. Implemented in Visual C++ - at UniBw Munchen under the coordination of Prof. Dr. Ing. H. D. Liess,
- ❖ E-learning application (eg. Carnot Cycle). Implemented in Visual J++ at UniBw Munchen under the co-ordination of Prof. Dr. Ing. M. Pfitzner,
- ❖ Object Oriented Programming Project Implemented in Visual C++,
- ❖ Data structures and algorithms project implemented in C++.
- ❖ Artificial Intelligence Project Implemented in Visual C++,
- ❖ Web sites development with and without JAVA applets,
- Virtual shop implemented in JSP and MySQL,
- ❖ A C-- compiler.

#### **Books:**

\* Răzvan Tudor Tănasie, Dorian Cojocaru, "Fuzzy Techniques in Computer Vision", ISBN 973-742-428-X, Editura Universitaria, Craiova, 2006.

## **Publications:**

- Cojocaru, D., Tanasie, T.R., Ivanescu, M., 2008, "Graphic Simulation for Camera Calibration in Visual-Servoing Application", 8th WSEAS International Conference on Signal Processing, Computational Geometry and Artificial Vision (ISCGAV'08), August 20-22, Rhodes (Rodos) Island, Greece.
- ❖ Cojocaru, D., Tanasie, T.R., 2008, "Calibration Application for Real-Time Hyperredundant Robot's Vision Control", Proceedings of the RAAD 2008 17th International Workshop on Robotics in Alpe-Adria-Danube Region, ISBN 978-88-9037-0-8, paper no. 39, September 15-17, 2008, Ancona, Italy.
- ❖ Cojocaru, D., Manta, F., Tanasie, T.R., Pana, C., 2008, "3D Vision for Continuum Robot Control", A 4-a Conferinta Internationala de Robotica − ROBOTICA'08, sub egida Universitatii Transilvania din Brasov si Societatea de Robotica din Romania, November 13-14, 2008, Brasov, Romanian (acceptată pentru publicare).
- Cojocaru, D., Tanasie, T.R., Ivanescu, M., 2008, "Graphic Simulator for the Visual Control of Hyperredundant Robots", WSEAS Transactions on Information Science and Applications, Issue, Volume, p-, ISSN 1790-0832 (acceptată pentru publicare).
- ❖ Tănasie, R.T., Pancu M., Grigoroiu V., "Romanian Phone Recognition System", Applied Computing Conference (Acc '08), Istanbul, Turkey.
- Cojocaru, D., Tanasie, T.R., Ivanescu, M., 2008, "Expressions' Generator, Evaluator and Derivator for Hyperredundant Robot's Control", 4th WSEAS/IASME International Conference on Dynamical Systems and Control (CONTROL'08).
- ❖ Tanasie, T.R., Cojocaru, D., "Graphic Simulation for Inverse Kinematics Algorithms in Visual Servoing Appliactions", 4th WSEAS/IASME International Conference on Dynamical Systems and Control (CONTROL'08), Corfu, Greece, ISSN 1790-2769, p181-186, 2008.
- ❖ Burdescu, D., Stănescu, L., Tănasie, R.T., Ion, A., "3D-Image Retrieval Novel Algorithm", Proceedings of MCCSIS, Lisbon, Portugal 2007, ISBN 978-972-8924-39-3, 2007.
- ❖ Tănasie, R.T., Popescu, M., Bogheanu, D., Ciocoiu, G., Cojocaru, D., "Fractal Art: Fractal Image and Music Generator", 7th WSEAS International Conference on Signal Processing, Computational Geometry and Artificial Vision 2007, Vouliagmeni, Grecia, ISSN 1790-5117, 2007.
- ❖ Tănasie, R.T., Cojocaru, D., "A Fuzzy Path Finding Algorithm Based on Artificial Potential Fields", International Computer Graphics Theory and Applications GRAPP 2007, ISBN 978-972-8865-72-6, 2007.
- Ivănescu, M., Cojocaru, D., Popescu, N., Popescu, D., Tănasie, R.T., "3D Visual Servoing for a Tentacle Manipulator", 6<sup>th</sup> ASSC Asian Control, Bali, Indonesia, ISBN 979-15017-0, 2006.
- ❖ Tănasie, R.T., Cojocaru, D., "A Visual Servoing Robot Control Architecture", WSEAS Transactions on Computers, Issue 11, Volume 5, p2682-2689, ISSN 1109-2750, 2006.
- ❖ Tănasie, R.T., Cojocaru, D., "Software Techniques for a Visual Servoing Architecture", 10th WSEAS International Conference on Computers, Vouliagmeni, Greece, ISSN 1790-5117, 2006.
- ❖ Cojocaru, D., Tănasie, R.T., "Fuzzy Based Image Processing for Robotic Vision", accepted paper at 13<sup>th</sup> International Congress on Sound and Vibration (ICSV 13), Vienna, Austria, 2006.
- Cojocaru, D., Tănasie, R.T., "Computer Graphics and Image Processing Tools for Visual Servoing", 6th WSEAS International Conference on Signal Processing, Computational Geometry and Artificial Vision (ISCGAV'06), Crete, Greece, 2006.

- ❖ Cojocaru, D., Tănasie, R.T., "A Software System for Visual Servoing", WSEAS Transactions on Information Science and Applications, p2086-2093, ISSN 1790-0832 2006.
- ❖ Ivănescu, M., Cojocaru, D., Popescu, N., Popescu, D., Tănasie, R. T., "A 3D Visual Servoing System", Annals of the University of Craiova, p36-41, Vol. 3(30), No. 1, ISSN 1841-0626, 2006.
- ❖ Ivănescu, M., Cojocaru, D., Popescu, N., Popescu, D., Tănasie, R.T., "Visual Based Control System for a Tentacle Manipulator", WSEAS Transactions on Information Science and Applications, Issue 3, Volume 3, p610-617, ISSN 1790-0832, 2006.
- ❖ Ivănescu, M., Cojocaru, D., Popescu, N., Popescu, D., Tănasie, R.T., "Hyperredundant Robot Control by Visual Servoing", Studies in Informatics and Control Journal, Volume 15, Number 1, p93-102, ISSN 1220-1766, 2006.
- ❖ Tănasie, R., Cojocaru, D., "Robot Cinematics Simulation for Educational Applications", EAEEIE, 17th EAEEIE Annual Conference on Innovation in Education for Electrical and Information Engineering (EIE), Craiova, Romania, ISBN 973-742-350-X, 2006.
- ❖ Ivănescu, M., Cojocaru, D., Popescu, N., Popescu, D., Tănasie, R.T., "Visual Servoing System for a Hyperredundant Robot", The 5th WSEAS International Conference on Signal Processing, Robotics and Automation (ISPRA '06), ISBN 960-8457-41-6, p113-118, Madrid, Spain, 2006.
- Cojocaru, D., Tănasie, R. T., Bărbulescu, E., "Experiments in Fuzzy Image Segmentation", XII<sup>th</sup> International Symposium On System Theory SINTES 2005, Vol.3 Software Engineering, ISBN 973-742-148-5, p499-504, Craiova, Romania, 2005.
- ❖ Tănasie, R. T., Tunaru, C., "Using Dynamic Techniques in Computer Graphics Applications", XII<sup>th</sup> International Symposium On System Theory SINTES 2005, Vol.3 Software Engineering, ISBN 973-742-148-5, p652-657, Craiova, Romania, 2005.
- ❖ Ivănescu, M., Cojocaru, D., Popescu, N., Popescu, D., Tănasie, R. T., "A 3D Visual Servoing System", XII<sup>th</sup> International Symposium On System Theory SINTES 2005, Vol.2 Mechatronics & Electronics, ISBN 973-742-148-5, p273-278, Craiova, Romania, 2005.
- ❖ Dorian Cojocaru, Răzvan Tudor Tănasie, "Visual Servoing for Mobile Robots", 15<sup>th</sup> International Conference on Control Systems and Computer Science CSCS15, ISBN 973-8449-89-8, p488-493, Bucureşti, 25-27.05.2005.
- ❖ Dorian Cojocaru, Răzvan Tudor Tănasie, "Fuzzy Techniques for Vision-Based Feedback in Food Quality Control", 14<sup>th</sup> International Workshop on Robotics in Alpe-Adria-Danube Region, RAAD 2005, Proceedings of RAAD'05, ISBN 973-718-241-3, p537-542, Bucureşti, 26-28.05.2005.
- ❖ Răzvan Tudor Tănasie, "Image Processing Using Fuzzy Methods", Annals of the University of Craiova – Series: Automation, Computers, Electronics and Mechatronics, Vol. 1, ISSN 1841-0626, p123-130, 2004.
- ❖ Răzvan Tudor Tănasie, "Applied Mathematics for Heat Transfer", XIth International Symposium On System Theory SINTES 2003, Vol.1 Automation and Mechatronic Systems, ISBN 973-8043-415-5, p271-276, Craiova, 23-24.10.2004.
- ❖ Răzvan Tudor Tănasie, Doroian Cojocaru, "Fuzzy Techniques in Computer Vision", 2<sup>nd</sup> Internetional Conference in Robotics Robotica 2004, Proceedings of the 2<sup>nd</sup> International Conference on Robotics, ISBN 973-97258-3-X, p177-178, Timișoara & Reșiţa, 14-16.10.2004.
- ❖ Răzvan Tudor Tănasie, "Fuzzy Techniques in Computer Vision"- lucrare de diplomă Facultatea de Automatică, Calculatoare şi Electronică Craiova, Secţia Calculatoare (Engleză), Specializarea Software, coordonator Prof. Univ. Dr. Ing. Mircea Ivănescu, 2004.

# **Participation in Scientific Research Projects:**

❖ "Autonomous Robot-Computer Vision Platforms, Intelligent, for Qualification, Sorting, Quality Inspection for Holonic Controlled Products, Services Oriented − SOFHICOR", contract PARTENERIAT Nr. 11-042/18.09.2007, collaboration subcontract 661/14.09.2007, 2007-2010.

- \* "Tentacular Robot Control Based on Computer Vision", grant CNCSIS PN II IDEI 102/01.10.2007, registered at University of Craiova with nr. 45C/27.09.2007, 2007-2010.
- \* "Models and Methods for Visual Control of Hyper-redundant Robots", Romanian Academy grant, GAR 100/09.08.2007, registered at the University of Craiova nr. 4174/03.08.2007, 2007-2009.
- ❖ "Online Informatics System for Content Based Querying for Multimedia Databases Obtained by Extracting Information from DICOM Files", beneficiary: CNCSIS, code 629, theme 18, grant type A, 29C/08.05.2007, 2007-2008.
- "Holonic Control Fabrication Platform with Multiple Robots and Integrated Computer Vision for Material Conditioning - RVHOLON", contract CEEX AMCSIT Nr. 146/20.07.2006, 2006-2008.
- ❖ "Research Regarding Mobile Mini-robots Having Pendular Motion − ROBOPEND", contract CEEX AMCSIT Nr. 90 / 31.07.2006, 2006-2008.
- \* "Graphical System for Virtual Visual Servoing Applications", beneficiary: CNCSIS, Td grant, code 76, theme 2, GR 16/09.05.07, 2006-2008, project coordinator: Răzvan Tudor Tănasie.
- ❖ "Algorithms for Medical Images Multimedia Databases Processing and Querying", beneficiary: CNCSIS, A type grant, GR155/04.05.2006, code 100, theme 7, 2005-2008.
- \* "Research and education resources apportion", CEEX module I, complex research-development project, CEEX 24, 103/10.10.2005; 2005-2008.
- ❖ "Research Promotion in Automation and Robotics for European and International Research Network Integration", CEEX module III, Proiecte de promovare a participarii la programele europene si internationale de cercetare, CEEX 14/2006, competition 2; 2006-2007.
- \* "Computer Vision Applications Promotion", beneficiary: CNCSIS, phase: Computer Vision Applications, CNCSIS code 718 Theme 3, Contract nr. 40202/4.11.2003; 2003-2004.
- \* "Fuzzy Techniques for Systems and Processes with Applicability in the Informational Society", beneficiary: CNCSIS, grant type A, CNCSIS code 100 Theme 4, Contract nr. 27661/14.03.2005, 2005-2007.

## **Skills and interests:**

- ❖ Computer science: object oriented programming, computer graphics, data structures and algorithms, database programming, web design, computer aided design, word processing,
- ❖ Programming languages: DirectX, Visual C++, JAVA, HTML, Pascal, C/C++, MySQL, MSSQL, PHP, JSP, CGI, Visual FoxPro, Visual Basic, ASP, JAVA Script, Clips, COOL, assembly language,
- ❖ Mathematics superior level,
- Driver license, 9 years experience.

## Other features:

- ❖ Team Working Capability,
- Adaptability,
- **.** Leadership.

# Foreign languages:

English: fluent written and spoken,
French: fluent written and spoken,
Italian: basic written and spoken,
German: basic written and spoken.

# Hobbies:

- Video games
- Sports: football, basketball, handball, tennis
- Movies
- Listening to music

My PhD thesis is called "Advanced Software techniques for Robotic Computer Vision Control". In order to finish my thesis I took three exams in the fields of robotics, shape recognition methods and fuzzy systems, as well as three papers in the fields of robot control, both conventionally and fuzzy, and through computer vision which I passed with the degree "Very Good".

Date: Signature:

22.10.2008