

PERSONAL INFORMATION

Lucian Mihai Itu

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POSITION
IOSUD UTBV

PhD Coordinator
Doctoral studies field: Control Engineering
Since: 2018

EXPERTISE FIELD AND
RESEARCH INTEREST AREAS

Parameter Estimation, Human Physiology, Machine Learning, Parallel Processing, Computational Fluid Dynamics

WORK EXPERIENCE

October 2014 - Present

Professor / Associate Professor / Assistant Professor

Transilvania University of Brasov, Department of Automation and Information Technology, Brasov, Romania

- Teaching courses and laboratories for 'Programmable Logic Controllers', 'Programming Real Time Applications', 'Control Systems for Technological Processes'
- Research activities

Academia

October 2014 - Present

Research Engineer

Siemens SRL, Corporate Technology, Brasov, Romania

- Biomedical engineering: parameter estimation methods, personalized modelling of the human arterial circulation, artificial intelligence

Industry

EDUCATION AND TRAINING

April 2014 – October 2015

PostDoc Researcher

t

Transilvania University of Brasov, Department of Automation and Information Technology, Brasov, Romania

- Methods for non-invasively diagnosing cardiovascular pathologies

October 2013 – September 2014

Intern

t

Siemens SRL, Corporate Technology, Brasov, Romania

- Parameter Estimation Methods, Personalized modeling of the human coronary circulation

October 2010 – September 2013

PhD

t

Transilvania University of Brasov, Department of Automation and Information Technology, Brasov, Romania

- Parallel Processing in the Multiscale Modeling of Coronary Hemodynamics

February 2011 – April 2011,
August 2011 – November 2011,
July 2012 – September 2012

Intern

t

Siemens Corporate Research and Technology, Princeton, NJ, USA

- Modeling of the cardiovascular system using computational fluid dynamics

October 2004 – July 2009

Diploma Engineer

t

Transilvania University of Brasov, Department of Automation and Information Technology, Brasov, Romania

- Control engineering, System identification, PLCs, Numerical Methods, Parallel and Distributed Processing

October 2004 – July 2009

High School

t

'Johannes Honterus' High School, Brasov, Romania

- Mathematics, Physics, Chemistry, Biology

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
German	C1	C1	C1	C1	C1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- Excellent communication skills gained during the work and collaboration with students (courses and laboratories), and through the numerous oral presentations of papers at scientific events

Organisational / managerial skills

- Excellent leadership skills gained as manager of several publicly and industry funded research projects

Job-related skills

- Excellent skills in machine learning, numerical methods, and modeling of the human physiology

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
PROFICIENT	PROFICIENT	PROFICIENT	INDEPENDENT	PROFICIENT

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- Numerical algorithms for the incompressible Navier-Stokes equations, immersed boundary methods, treatment of special boundary conditions, numerical algorithms for large linear systems of equations.
- Machine Learning / Artificial Intelligence
- Patient-specific one-dimensional and three-dimensional blood flow simulation
- Patient-specific coronary circulation computations
- Patient-specific aortic coarctation computations
- High Performance Computing and parallel programming on GPUs using the CUDA language.
- C/C++ programming, LabWindows/CVI for process control (in combination with OPC servers, Modbus and other dedicated protocols), multithreading programming, network applications, real-time applications.
- SQL syntax and general principles for working with relational databases (experience in conjunction with MS-SQL Server, MySQL) and data warehouses.

ADDITIONAL INFORMATION

Publications

1. Itu, L. M., Sharma, P., Suci, C., Moldoveanu, F., Comaniciu, D., Personalized Blood Flow Computations: A Hierarchical Parameter Estimation Framework for Tuning Boundary Conditions, *International Journal on Numerical Methods in Biomedical Engineering*, Vol. 33, March 2017, pp. e02803, ISSN: 2040-7947, DOI: 10.1002/cnm.2803 (ISI journal, WOS:000395407900006, FI: 2.192).
2. Neumann, D., Mansi, T., Itu, L.M., Georgescu, B., Kayvanpour, E., Sedaghat-Hamedani, F., Amr, A., Haas, J., Katus, H., Meder, B., Steidl, S., Hornegger, J., Comaniciu, D., A Self-Taught Artificial Agent for Multi-Physics Computational Model Personalization, *Medical Image Analysis*, Vol. 34, Dec. 2016, pp. 52–64, ISSN: 1361-8415, DOI: 10.1016/j.media.2016.04.003 (ISI journal, WOS:000385320800006, FI: 4.188).
3. Calmac, L., Niculescu, R., Badila, E., Weiss, E., Zamfir, D., Penes, D., Itu, L.M., Lazar, L., Carp, M., Itu, A., Suci, C., Passerini, T., Sharma, S., Georgescu, B., Comaniciu, D., A data-driven approach combining image-based anatomical features and resting state measurements for the functional assessment of coronary artery disease, *Journal of the American College of Cardiology*, Vol. 68, November 2016, pp. B212-B213, ISSN: 0735-1097, DOI: 10.1016/j.jacc.2016.09.664 (ISI Journal, WOS:000398590400054, FI: 19.896).
4. Itu, L. M., Rapaka, S., Passerini T., Georgescu, B., Schwemmer, C., Schoebinger, M., Flohr, T., Sharma, P., Comaniciu, D., A Machine Learning Approach for Computation of Fractional Flow Reserve from Coronary Computed Tomography, *Journal of Applied Physiology*, Vol. 121, July 2016, pp. 42-52, ISSN: 8750-7587, DOI: 10.1152/jappphysiol.00752.2015 (ISI journal, WOS:000372013600004, FI: 3.351).
5. Itu, L.M., Passerini, T., Calmac, L., Niculescu, R., Badila, E., Weiss, E., Zamfir, D., Penes, D., Lazar, L., Carp, M., Itu, A., Suci, C., Sharma, S., Georgescu, B., Comaniciu, D., Image-Based Computation of Instantaneous Wave-free Ratio from Routine Coronary Angiography - Evaluation of a Hybrid Decision Making Strategy with FFR, *Journal of the American College of Cardiology*, Vol. 67, April 2016, pp. 328, ISSN: 0735-1097, DOI: 10.1016/S0735-1097(16)30329-1 (ISI Journal, WOS:000375188701172, FI: 19.896).
6. Coenen, A., Lubbersa, M., Kurata, A., Kono, A., Dedic, A., Chelu, R., Dijkshoorn, M., van Geuns, R.J., Schoebinger, M., Itu, L.M., Sharma, P., Nieman, K., Coronary CT angiography derived fractional flow reserve: Methodology and evaluation of a point of care algorithm, *Journal of Cardiovascular Computed Tomography*, Vol. 10, March–April 2016, pp. 105–113, ISSN: 1934-5925, DOI: 10.1016/j.jcct.2015.12.006 (ISI journal, FI: 3.185).
7. Tröbs, M., Achenbach, S., Röther, J., Redel, T., Scheuring, M., Winneberger, D., Klingenberg, K., Itu, L.M., Passerini, T., Kamen, A., Sharma, P., Comaniciu, D., Schlundt, C., Comparison of Fractional Flow Reserve Based on Computational Fluid Dynamics Modeling Using Coronary Angiographic Vessel Morphology versus Invasively Measured Fractional Flow Reserve, *The American Journal of Cardiology*, Vol. 117, Jan 2016, pp. 29-35, ISSN: 0002-9149, DOI: 10.1016/j.amjcard.2015.10.008 (ISI journal, WOS:000368048900005, FI: 3.398).
8. Calmac, L., Niculescu, R., Badila, E., Weiss, E., Zamfir, D., Itu, L.M., Lazar, L., Carp, M., Itu, A., Suci, C., Passerini, T., Sharma, S., Georgescu, B., Comaniciu, D., Image-Based Computation of Instantaneous Wave-free Ratio from Routine Coronary Angiography - Initial Validation by Invasively Measured Coronary Pressures, *Journal of the American College of Cardiology*, Vol. 66, October 2015, pp. B17-B18, ISSN: 0735-1097, DOI: 10.1016/j.jacc.2015.08.087 (ISI Journal, WOS:000363329000041, FI: 19.896).
9. Ralovich, K., Itu, L.M., Vitanovski, D., Sharma, P., Ionasec, R., Mihalef, V., Krawtschuk, W., Zheng, Y., Everett, A., Pongiglione, G., Leonardi, B., Ringel, R., Navab N., Heimann, T., Comaniciu, D., Noninvasive hemodynamic assessment, treatment outcome prediction and follow-up of aortic coarctation from MR imaging, *Medical Physics*, Vol. 42, April 2015, pp. 2143-2156, ISSN: 2473-4209, DOI: 10.1118/1.4914856 (ISI journal, WOS:000354776800006, FI: 2.617).
10. Itu, L. M., Sharma, P., Passerini T., Kamen, A., D., Suci, C., Comaniciu, D., A Parameter Estimation Framework for Patient-specific Hemodynamic Computations, *Journal of Computational Physics*, Vol. 281, Jan, 2015, pp. 316-333, ISSN 0021-9991, DOI: 10.1016/j.jcp.2014.10.034 (ISI journal, WOS:000346429300018, FI: 2.774).
11. Schlundt, C., Redel, T., Scheuring, M., Groke, D., Klingenberg, K., Itu, L.M., Sharma, P., Kamen, A., Comaniciu, D., Achenbach, S. Model-Based Determination of Fractional Flow Reserve Based on Coronary Angiography–Initial Validation by Invasively Measured FFR, *Journal of the American College of Cardiology*, Vol. 64, September 2014, pp. B96-B97, ISSN: 0735-1097, DOI: 10.1016/j.jacc.2014.07.380 (ISI Journal, WOS:000359649700030, FI: 19.896).
12. Itu, L. M., Sharma, P., Kamen, A., D., Suci, C., Comaniciu, D., Graphics Processing Unit Accelerated One-Dimensional Blood Flow Computation in the Human Arterial Tree, *International Journal on Numerical Methods in Biomedical Engineering*, Vol. 29, December, 2013, pp. 1428 – 1455, ISSN: 2040-7947, DOI: 10.1002/cnm.2585 (ISI journal, WOS:000327732300008, FI: 2.192).
13. Itu, L. M., Sharma, P., Ralovich, K., Mihalef, V., Ionasec, R., Everett, A., Ringel, R., Kamen, A., Comaniciu, D., Non-invasive Hemodynamic Assessment of Aortic Coarctation: Validation with in-vivo Measurements, *Annals of Biomedical Engineering*, Vol. 41, April, 2013, pp. 669-681, ISSN: 1573-9686, DOI: 10.1007/s10439-012-0715-0 (ISI journal, WOS:000316566400002, FI: 3.221).

Presentations

- Itu, L. M., Sharma, P., Georgescu, B., Kamen, A., D., Suci, C., Comaniciu, D. Model Based Non-invasive Estimation of PV Loop from Echocardiography, Proc. of the 36th Annual Inter. Conf. of the IEEE Engineering in Medicine & Biology Society - EMBC 2014, Chicago, USA, August 26-30, 2014, pp. 6774-6777, ISSN: 1094-687X (ISI Proceedings, IEEE Xplore, WOS:000350044706186).
- Itu, L. M., Suci, C. An external tissue support model for the arterial wall based on in vivo data, Proc. of IEEE International Symposium on Medical Measurements and Applications – MeMeA 2014, Lisbon, Portugal, June 11-12, 2014, pp. 1-6, ISBN: 978-1-4799-2922-1 (ISI Proceedings, IEEE Xplore, WOS:000346747000029).
- Itu, L. M., Suci, C. A method for modeling surrounding tissue support and its global effects on arterial hemodynamics, Proc. of IEEE International Conference on Biomedical and Health Informatics – BHI 2014, Valencia, Spain, June 1-4, 2014, pp. 1-4, ISSN: 2168-2194 (ISI Proceedings, IEEE Xplore, WOS:000346504900141).
- Itu, L. M., Sharma, P., Kamen, A., D., Suci, C., Comaniciu, D. A Novel Coupling Algorithm for Computing Blood Flow in Viscoelastic Arterial Models, Proc. of the 35th Annual Inter. Conf. of the IEEE Engineering in Medicine & Biology Society - EMBC 2013, Osaka, Japan, July 3-7, 2013, pp. 727-730, ISSN: 1557-170X (ISI Proceedings, IEEE Xplore, WOS:000341702101054).
- Sharma, P., Itu, L. M., Zheng, X., Kamen, A., Bernhardt, D., Suci, C., Comaniciu, D., A Framework for Personalization of Coronary Flow Computations During Rest and Hyperemia, Proc. of the 34th Annual Inter. Conf. of the IEEE Engineering in Medicine & Biology Society - EMBC 2012, San Diego, California, USA, Aug. 28-Sept. 1, 2012, pp. 6665 - 6668, ISSN: 1557-170X, ISBN: 978-1-4244-4119-8 (ISI Proceedings, IEEE Xplore, WOS:000313296506209).
- Itu, L. M., Sharma, P., Zheng, X., Mihalef, V., Kamen, A., Suci, C., Patient-Specific Modeling and Hemodynamic Simulation in Healthy and Diseased Coronary Arteries, Proc. of the ASME 2012 Summer Bioengineering Conference - SBC 2012, Fajardo, Puerto Rico, June 20-23, 2012, ISBN 978-0-7918-4480-9 (ISI Proceedings, Google Scholar, WOS:000325036600291)
- Itu, L.M., Sharma P., Kamen, A., Suci, C., Postelnicu, A., Moldoveanu, F., GPU Accelerated Simulation of the Human Arterial Circulation, Proceedings of the 13th International Conference on Optimization of Electrical and Electronic Equipment – OPTIM 2012, Braşov, Romania, May 24-26, 2012, pp. 1478-1485, ISSN: 1842-0133 (ISI Proceedings, IEEE Xplore, WOS:000398866700225).
- Itu, L. M., Sharma, P., Mihalef, V., Kamen, A., Suci, C., Comaniciu, D., A Patient-specific Reduced-order Model for Coronary Circulation, Proc. of the IEEE Inter. Symp. On Biomedical Imaging - ISBI 2012, Barcelona, Spain, May 2-5, 2012, pp. 832-835, ISSN: 1945-7928, ISBN: 978-1-4577-1857-1 (ISI Proceedings, IEEE Xplore, WOS:000312384100209).
- Itu, L.M., Suci, C., Postelnicu, A., Moldoveanu, F., Analysis of Outflow Boundary Condition Implementations for 1D Blood Flow Models, Proceedings of the 3rd IEEE International Conference on e-Health and Bioengineering – EHB 2011, Iaşi, Romania, November 24-26, 2011, pp. 467-470, ISBN: 978-1-4577-0292-1 (ISI Proceedings, IEEE Xplore, WOS:000304806300095).

Projects

- Contr. nr. 732907/2016-2019, Program: Horizon 2020 (H2020) – MHMD – My Health My Data, financed by the EU Commission, 147.250 Euros, Universitatea Transilvania din Braşov (Principal Investigator).
- Contr. nr. 8/2017/2017-2020, program: FLAG-ERA – ITFoC – Information Technology: The Future of Cancer Treatment, financed by the EU Commission / UEFISCDI, 62.500 Euros, Universitatea Transilvania din Braşov (Principal Investigator).
- Contr. nr. 10/2017/2017-2020, program: FLAG-ERA – CONVERGENCE – Frictionless Energy Efficient Convergent Wearables for Healthcare and Lifestyle Applications, financed by the EU Commission / UEFISCDI, 35.000 Euros, Universitatea Transilvania din Braşov (Principal Investigator).
- Contr. nr. 145PED/2017,/2017-2018, program PNIII: Programul 2 - Cresterea competitivitatii economiei romanesti prin cercetare, dezvoltare si inovare – Image-based functional assessment of renal artery stenosis using Computer Tomography Angiography or routine X-ray Angiography, financed by UEFISCDI, 158.000 RON, Siemens SRL (Principal Investigator).
- Contr. nr. 138PED/2017,/2017-2018, program PNIII: Programul 2 - Cresterea competitivitatii economiei romanesti prin cercetare, dezvoltare si inovare – Image-based functional assessment of complex coronary artery lesions using optical coherence tomography and routine angiography, financed by UEFISCDI, 208.000 RON, Siemens SRL (Principal Investigator).

Citations

794 citations (google scholar: <https://scholar.google.com/citations?user=6azBRUAAAAAJ&hl=en>)

H Indexes

h-index: 16
li0-index: 22

LIST OF RELEVANT PUBLICATIONS /RESEARCH (selection)

1. Itu, L. M., Sharma, P., Suci, C., Moldoveanu, F., Comaniciu, D., Personalized Blood Flow Computations: A Hierarchical Parameter Estimation Framework for Tuning Boundary Conditions, International Journal on Numerical Methods in Biomedical Engineering, Vol. 33, March 2017, pp. e02803, ISSN: 2040-7947, DOI: 10.1002/cnm.2803 (ISI journal, WOS:000395407900006, FI: 2.192).
<http://onlinelibrary.wiley.com/doi/10.1002/cnm.2803/abstract>
2. Neumann, D., Mansi, T., Itu, L.M., Georgescu, B., Kayvanpour, E., Sedaghat-Hamedani, F., Amr, A., Haas, J., Katus, H., Meder, B., Steidl, S., Hornegger, J., Comaniciu, D., A Self-Taught Artificial Agent for Multi-Physics Computational Model Personalization, Medical Image Analysis, Vol. 34, Dec. 2016, pp. 52–64, ISSN: 1361-8415, DOI: 10.1016/j.media.2016.04.003 (ISI journal, WOS:000385320800006, FI: 4.188).
<http://www.sciencedirect.com/science/article/pii/S1361841516300214>
3. Calmac, L., Niculescu, R., Badila, E., Weiss, E., Zamfir, D., Penes, D., Itu, L.M., Lazar, L., Carp, M., Itu, A., Suci, C., Passerini, T., Sharma, S., Georgescu, B., Comaniciu, D., A data-driven approach combining image-based anatomical features and resting state measurements for the functional assessment of coronary artery disease, Journal of the American College of Cardiology, Vol. 68, November 2016, pp. B212-B213, ISSN: 0735-1097, DOI: 10.1016/j.jacc.2016.09.664 (ISI Journal, WOS:000398590400054, FI: 19.896).
<http://www.sciencedirect.com/science/article/pii/S0735109716359861>
4. Itu, L. M., Rapaka, S., Passerini T., Georgescu, B., Schwemmer, C., Schoebinger, M., Flohr, T., Sharma, P., Comaniciu, D., A Machine Learning Approach for Computation of Fractional Flow Reserve from Coronary Computed Tomography, Journal of Applied Physiology, Vol. 121, July 2016, pp. 42-52, ISSN: 8750-7587, DOI: 10.1152/japplphysiol.00752.2015 (ISI journal, WOS:000372013600004, FI: 3.351).
<https://www.ncbi.nlm.nih.gov/pubmed/27079692>
5. Itu, L.M., Passerini, T., Calmac, L., Niculescu, R., Badila, E., Weiss, E., Zamfir, D., Penes, D., Lazar, L., Carp, M., Itu, A., Suci, C., Sharma, S., Georgescu, B., Comaniciu, D., Image-Based Computation of Instantaneous Wave-free Ratio from Routine Coronary Angiography - Evaluation of a Hybrid Decision Making Strategy with FFR, Journal of the American College of Cardiology, Vol. 67, April 2016, pp. 328, ISSN: 0735-1097, DOI: 10.1016/S0735-1097(16)30329-1 (ISI Journal, WOS:000375188701172, FI: 19.896).
<http://www.sciencedirect.com/science/article/pii/S0735109716303291>
6. Coenen, A., Lubbersa, M., Kurata, A., Kono, A., Dedic, A., Chelu, R., Dijkshoorn, M., van Geuns, R.J., Schoebinger, M., Itu, L.M., Sharma, P., Nieman, K., Coronary CT angiography derived fractional flow reserve: Methodology and evaluation of a point of care algorithm, Journal of Cardiovascular Computed Tomography, Vol. 10, March–April 2016, pp. 105–113, ISSN: 1934-5925, DOI: 10.1016/j.jcct.2015.12.006 (ISI journal, FI: 3.185).
<https://www.ncbi.nlm.nih.gov/pubmed/26747231>
7. Tröbs, M., Achenbach, S., Röther, J., Redel, T., Scheuring, M., Winneberger, D., Klingenberg, K., Itu, L.M., Passerini, T., Kamen, A., Sharma, P., Comaniciu, D., Schlundt, C., Comparison of Fractional Flow Reserve Based on Computational Fluid Dynamics Modeling Using Coronary Angiographic Vessel Morphology versus Invasively Measured Fractional Flow Reserve, The American Journal of Cardiology, Vol. 117, Jan 2016, pp. 29-35, ISSN: 0002-9149, DOI: 10.1016/j.amjcard.2015.10.008 (ISI journal, WOS:000368048900005, FI: 3.398).
<https://www.ncbi.nlm.nih.gov/pubmed/26596195>
8. Calmac, L., Niculescu, R., Badila, E., Weiss, E., Zamfir, D., Itu, L.M., Lazar, L., Carp, M., Itu, A., Suci, C., Passerini, T., Sharma, S., Georgescu, B., Comaniciu, D., Image-Based Computation of Instantaneous Wave-free Ratio from Routine Coronary Angiography - Initial Validation by Invasively Measured Coronary Pressures, Journal of the American College of Cardiology, Vol. 66, October 2015, pp. B17-B18, ISSN: 0735-1097, DOI: 10.1016/j.jacc.2015.08.087 (ISI Journal, WOS:000363329000041, FI: 19.896).
<http://www.sciencedirect.com/science/article/pii/S0735109715050494>
9. Ralovich, K., Itu, L.M., Vitanovski, D., Sharma, P., Ionasec, R., Mihalef, V., Krawtschuk, W., Zheng, Y., Everett, A., Pongiglione, G., Leonardi, B., Ringel, R., Navab N., Heimann, T., Comaniciu, D., Noninvasive hemodynamic assessment, treatment outcome prediction and follow-up of aortic coarctation from MR imaging, Medical Physics, Vol. 42, April 2015, pp. 2143-2156, ISSN: 2473-4209, DOI: 10.1118/1.4914856 (ISI journal, WOS:000354776800006, FI: 2.617).
<https://www.ncbi.nlm.nih.gov/pubmed/25979009>
10. Itu, L. M., Sharma, P., Passerini T., Kamen, A., D., Suci, C., Comaniciu, D., A Parameter Estimation Framework for Patient-specific Hemodynamic Computations, Journal of Computational Physics, Vol. 281, Jan, 2015, pp. 316-333, ISSN 0021-9991, DOI: 10.1016/j.jcp.2014.10.034 (ISI journal, WOS:000346429300018, FI: 2.774).
<http://www.sciencedirect.com/science/article/pii/S0021999114007165>
11. Schlundt, C., Redel, T., Scheuring, M., Groke, D., Klingenberg, K., Itu, L.M., Sharma, P., Kamen, A., Comaniciu, D., Achenbach, S., Model-Based Determination of Fractional Flow Reserve Based on Coronary Angiography–Initial Validation by Invasively Measured FFR, Journal of the American College of Cardiology, Vol. 64, September 2014, pp. B96-B97, ISSN: 0735-1097, DOI: 10.1016/j.jacc.2014.07.380 (ISI Journal, WOS:000359649700330, FI: 19.896).
<http://www.sciencedirect.com/science/article/pii/S0735109714049201>
12. Itu, L. M., Sharma, P., Kamen, A., D., Suci, C., Comaniciu, D., Graphics Processing Unit Accelerated One-Dimensional Blood Flow Computation in the Human Arterial Tree, International Journal on Numerical Methods in Biomedical Engineering, Vol. 29, December, 2013, pp. 1428 – 1455, ISSN: 2040-7947, DOI: 10.1002/cnm.2585 (ISI journal, WOS:000327732300008, FI: 2.192).
<http://onlinelibrary.wiley.com/doi/10.1002/cnm.2585/abstract>
13. Itu, L. M., Sharma, P., Ralovich, K., Mihalef, V., Ionasec, R., Everett, A., Ringel, R., Kamen, A., Comaniciu, D., Non-invasive Hemodynamic Assessment of Aortic Coarctation: Validation with in-vivo Measurements, Annals of Biomedical Engineering, Vol. 41, April, 2013, pp. 669-681, ISSN: 1573-9686, DOI: 10.1007/s10439-012-0715-0 (ISI journal, WOS:000316566400002, FI: 3.221).
<https://link.springer.com/article/10.1007/s10439-012-0715-0>

14. Nita, C., Stroia, I., Itu, L.M., Suci, C., Mihalef, V., Datar, M., Rapaka, S., Sharma, P. GPU accelerated, robust method for voxelization of solid objects, 20th IEEE High Performance Extreme Computing Conference, Waltham, MA, USA, Sept. 13-15, 2016, pp. 50-55, ISBN: 978-1-5090-3526-7 (ISI Proceedings, WOS:000391407100006)
<http://ieeexplore.ieee.org/document/7761582>
15. Vizitiu, A., Itu, L., Joyseere, R., Depeursinge, A., Muller, H., Suci, C. GPU-Accelerated Texture Analysis Using Steerable Riesz Wavelets, 24th Euromicro International Conference on Parallel, Distributed, and Network-Based Processing – PDP 2016, Heraklion Crete, Greece, February 17-19, 2016, pp. 56-61, ISSN: 2377-5750 (ISI Proceedings, WOS:000381810900066)
<http://ieeexplore.ieee.org/document/7445372/>
16. Iacob, A., Itu, L.M., Sasu, L., Moldoveanu, F., Suci, C., GPU Accelerated Information Retrieval Using Bloom Filters, Proceedings of the 19th International Conference on System Theory, Control and Computing – ICSTCC 2015, Cheile Grădiștei – Fundata, Romania, October 14-16, 2015, pp. 872-876, ISBN: 978-1-4799-8481-7 (ISI Proceedings, WOS:000382384100145)
<http://ieeexplore.ieee.org/document/7321404/>
17. Stroia, I., Itu, L., Niță, C., Lazăr, L., Suci, C. GPU Accelerated Geometric Multigrid Method: Performance Comparison on Different Architectures, 19th Inter. Conf. on System Theory, Control and Computing - ICSTCC 2015, Sinaia, Romania, October 14-16, 2015, pp. 175-179, ISBN: 978-1-4799-8482-4 (ISI Proceedings, WOS:000382384100030)
<http://ieeexplore.ieee.org/document/7321289/>
18. Neumann, D., Mansi, T., Itu, L.M., Georgescu, B., Kayvanpur, E., Sedaghat-Hamedani, F., Haas, J., Katus, H., Meder, B., Steidl, S., Hornegger, J., Comaniciu, D., Vito - A Generic Agent for Multi-Physics Model Personalization: Application to Heart Modeling, Proc. of the 18th Inter. On Medical Image Computing and Computer Assisted Intervention - MICCAI 2015, Munich, Germany, Oct. 5-9, 2015, pp. 442-449, ISBN: 978-3-319-24570-6 (ISI Proceedings, Springerlink,).
https://link.springer.com/chapter/10.1007/978-3-319-24571-3_53
19. Stroia, I., Itu, L., Niță, C., Lazăr, L., Suci, C. GPU Accelerated Geometric Multigrid Method: Comparison with Preconditioned Conjugate Gradient, 19th IEEE High Performance Extreme Computing Conference, Waltham, MA, USA, Sept. 15-17, 2015, pp. 1-6, ISBN: 978-1-4673-9287-7 (ISI Proceedings, WOS:000380543000044)
<http://ieeexplore.ieee.org/document/7322480/>
20. Nita, C., Itu, L. M., Mihalef, V., Sharma, P., Rapaka, S., GPU-accelerated model for fast, three-dimensional fluid-structure interaction computations, Proc. of the 37th Annual Inter. Conf. of the IEEE Engineering in Medicine & Biology Society - EMBC 2015, Milano, August 25-29, 2015, pp. 965-968, ISSN: 1094-687X (ISI Proceedings, IEEE Xplore, WOS:000366206800053).
<http://ieeexplore.ieee.org/document/7318524/>