INFORMAŢII PERSONALE

Lucian Mihai ITU

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LOCUL DE MUNCA
POZIŢIA IOSUD UTBv

Universitatea Transilvania din Brașov
Conducător de doctorat – Domeniul Ingineria Sistemelor
Anul obținerii dreptului de conducere doctorat: 2018

DOMENII DE COMPETENȚĂ PROFESIONALĂ / ARII DE INTERES ÎN CERCETARE

Estimarea parametrilor, Fiziologia umană, Invățare automată (Machine Learning), Procesare paralela, dinamica fluidelor

EXPERIENŢA PROFESIONALĂ

Octombrie 2014 - prezent

Profesor / Conferențiar / Șef lucrări

Universitatea Transilvania din Brașov, Departamentul de Automatică și Tehnologia Informației, Brașov, România

- Predarea cursurilor ‘Automate și microprogramare’, ‘Programarea aplicațiilor de timp real’, ‘Sisteme de conducere a proceselor tehnologice’
- Activități de cercetare

Octombrie 2014 - prezent

Inginer cercetător

Siemens SRL, Corporate Technology, Brasov, Romania

- Inginerie biomedicală: metode de estimare a parametrilor, modelare personalizată a circulației arteriale umane, inteligență artificială
- Procesare de imagini

EDUCAŢIE ŞI FORMARE

Aprilie 2014 – Octombrie 2015

Post-doctorat

Universitatea Transilvania din Brașov, Departamentul de Automatică și Tehnologia Informației, Brașov, România

- Metode pentru diagnosticarea non-invazivă a patologiilor cardiovasculare

Octombrie 2013 – Septembrie 2014

Bursier

Siemens SRL, Corporate Technology, Brasov, Romania

- Metode de estimare a parametrilor
- Modelarea personalizată a circulației coronariene umane

Aprilie 2014 – Octombrie 2015

Doctorat

Universitatea Transilvania din Brașov, Departamentul de Automatică și Tehnologia Informației, Brașov, România

- Utilizarea procesării paralele în modelarea multiscalară a hemodinamicii coronariene

Februarie 2011 – Aprilie 2011, August 2011 – Noiembrie 2011, Iulie 2012 – Septembrie 2012

Practicant

Siemens Corporate Research and Technology, Princeton, NJ, SUA

- Modelarea sistemului cardiovascular folosind teoria dinamicii fluidelor

Aprilie 2014 – Octombrie 2015

Inginer Diplomat

Universitatea Transilvania din Brașov, Departamentul de Automatică și Tehnologia Informației, Brașov, România

- Teoria sistemelor
- Identificarea sistemelor
- Automate programabile
- Metode numerice
- Procesare paralelă și distribuită

Aprilie 2014 – Octombrie 2015

Bacalaureat

Liceul teoretic 'Johannes Honterus', Brașov, România

- Matematică
- Fizica
- Chimie
- Biologie

COMPETENTE PERSONALE

Limba(i) maternă(e): Română

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversaţie	Discurs oral	
Engleză	C1	C1	C1	C1	C1
Germană	C1	C1	C1	C1	C1

Niveluri: A1/2: Utilizator elementar - B1/2: Utilizator independent - C1/2: Utilizator experimentat
Cadrul european comun de referinţă pentru limbi străine

Competenţe de comunicare

- Competențe excelente de comunicare dobândite prin colaborarea cu studenții (cursuri și laboratoare), și prin numeroasele prezentări orale ale articolelor științifice la conferințe de specialitate

Competenţe organizaţionale/manageriale

- Competențe excelente organizaționale dobândite ca manager în numeroase proiecte de cercetare cu finanțare publică sau privată

Competenţe dobândite la locul de muncă

- Competențe excelente în inteligență artificială, metode numerice și modelarea fiziologiei umane

Competenţe informatice

- Algoritmi numerici pentru ecuatiile incompresibile Navier-Stokes
- Metode iterative pentru rezolvarea sistsmelor de ecuații liniare și neliniare
- Inteligență artificială
- Simulări hemodinamice unidimensionale și tridimentionale personalizate
- Simularea personalizată a circulației coronariene
- Simularea personalizată a coarctației aortice
- Procesare paralelă folosind GPU-uri și limbajul CUDA
- Programare C/C++, LabWindows/CVI pentru controlul proceselor (în combinație cu servere OPC, Modbus și alte protocoale dedicate)
- Programare multi-threading
- Aplicații de timp real
- Sintaxă SQL și principii generale de utilizare a bazelor de date relaționale (cunoașterea MS-SQL Server, MySQL)

INFORMATII SUPLIMENTARE

Publicaţii

1. Itu, L. M., Sharma, P., Suciu, 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., Suciu, 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/japplphysiol.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., Suciu, 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., Scheuering, M., Winneberger, D., Klingenbeck, 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. 1117, 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., Suciu, 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., Suciu, 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., Scheuering, M., Groke, D., Klingenbeck, 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, Setember 2014, pp. B96-B97, ISSN: 0735-1097, DOI: 10.1016/j.jacc.2014.07.380 (ISI Journal, WOS:000359649700330, FI: 19.896).

12. Itu, L. M., Sharma, P., Kamen, A., D., Suciu, 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).

Prezentări

Itu, L. M., Sharma, P., Georgescu, B., Kamen, A., D., Suciu, 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., Suciu, 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., Suciu, 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., Suciu, 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., Suciu, 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., Suciu, C., Patient-Specific Modeling and Hemodyanmic 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., Suciu, 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., Suciu, 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., Suciu, 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).

Proiecte

1. 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).
2. 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).
3. 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).
4. 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).
5. 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).

Citări

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

Indici Hirsch

h-index: 16
li0-index: 22

Lista publicațiilor relevante – selecție

1. Itu, L. M., Sharma, P., Suciu, 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., Suciu, 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., Suciu, 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., Scheuering, M., Winneberger, D., Klingenbeck, 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. 1117, 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., Suciu, 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., Suciu, 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., Scheuering, M., Groke, D., Klingenbeck, 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, Setember 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., Suciu, 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., Suciu, 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., Joyseeree, R., Depeursinge, A., Muller, H., Suciu, C. GPU–Accelerated Texture Analysis Using Steerable Riesz Wavelets, 24th Euromirco 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., Suciu, 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., Niţă, C, Lazăr, L., Suciu, 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., Niţă, C, Lazăr, L., Suciu, 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/