

# CURRICULUM VITAE

## Personal and Contact Information

<b>Surname / Name</b>	Vassilios D. Tsakanikas
<b>Address</b>	Navarinou 9, 30133 Agrinio, Greece
<b>Telephone Number</b>	+306972745067, +302641059282
<b>Email</b>	vasilistsakanikas@gmail.com
<b>Date of Birth</b>	01 / 01 / 1983
<b>Place of Birth</b>	Agrinio, Greece
<b>Marital Status</b>	Married, two children

## Education

2016 – present	<b>PhD candidate.</b> London South Bank University, School of Engineering
2005 – 2007	Master in Computer Science, Athens University of Economics and Business, Department of Informatics <b>Master Thesis:</b> «Reducing the Transmission Power Requirements of the Multimedia Broadcast/ Multicast Service» Grade: 9,00/10,00
2000 – 2005	Diploma in Electrical and Computer Engineering, National Technical University of Athens, School of Electrical and Computer Engineering <b>Diploma Thesis:</b> «Interaction between mobile communications handsets and the user's head (both adult and child) by applying the Finite Difference Time Domain method (FDTD)» <b>Grade:</b> 8,00/10,00
1999 – 2000	Diploma of 1st Agrinio High School <b>Grade:</b> 19,40/20,00

## Seminars

2011	<b>Centre for Study and Psychophysiology and Education</b> Department of Athens University Successful Seminars Training in "Psychoeducational Training" Agrinio, October 2010 - June 2011
2011	<b>Ministry of Education and Religious Affairs</b> Regional Training Center of Patras Successful completion of the project "Training of teachers in the first class General Lyceum in the subject Research Projects (Project)» Patra, 27 & June 28, 2011

## Current / Previous Employment (Software engineering)

2020 – 2021	<b>Technology and Research Institute / Institute of Molecular Biology and Biotechnology / Division of Biomedical Research</b> Research work for EU funded program " <i>An Integrated POC solution for diagnosis and therapy monitoring of heart failure patients</i> ", (HORIZON2020 – 768686)
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- 2018 – 2021**                    **Research committee of University of Ioannina**  
 Research work for EU funded program “*Holobalance: HOLOgrams for personalised virtual coaching and motivation in an ageing population with BALANCE disorders*” (HORIZON2020 – 769574)
- 2019 – 2021**                    **Research committee of University of Ioannina**  
 Research work for EU funded program “*Taxinomisis: A multidisciplinary approach for the stratification of patients with carotid artery disease*” (HORIZON2020 – 755320)
- 2016**                                **Technological Educational Institute of Western Greece / Research Committee**  
 Research work (machine learning algorithms) for EU funded program “*RADIO: Robots in assisted living environments: Unobtrusive, efficient, reliable and modular solutions for independent ageing*” (HORIZON2020 – 643892)
- 2014-2015**                    **ENVITECH SOLUTIONS**  
 Member of the working group (analysis algorithms and biomedical signal processing) in the research program PredictES - 11SYN\_10\_998 (CO-2011).
- 2014**                                **Institute of Communications and Computer Systems - National Technical University of Athens (NTUA ICCS)**  
 System development within the work package «*Open Source Finite Element Modelling Tool and 3d Visualization*», within the European project work SIFEM 63/817, FP7 / ICT / Collaborative Project, GA No 600933, 1/2 / 13-31 / 1 / 16.
- 2014**                                **Technology and Research Institute / Institute of Molecular Biology and Biotechnology / Division of Biomedical Research**  
 Development of Decision Support System, under the co-financed Programme of the European Union «*A remote controlled Sensorized Artificial heart enabling patients empowerment and new therapy approaches - (SensorART)*» - FP7-248763 - Large-scale Integrating Project Integrated Project (part funded by the European Commission).
- 2012**                                **University of Patras / Research Committee**  
 Adjustment of export algorithms klinikogenetikon standards under the new polymorphisms were found to be associated with colorectal cancer in the program: «*MATCH - Colon Cancer Treatment by discovering mutations on tumor suppressor genes*», sponsored by: FONDAZIONALE ISTITUTO ONCOLOGICO with Ref . Program B.690.
- 2012**                                **Technology and Research Institute / Institute of Molecular Biology and Biotechnology / Division of Biomedical Research**  
 Development of Decision Support System, under the co-financed Programme of the European Union «*A remote controlled Sensorized Artificial heart enabling patients empowerment and new therapy approaches - (SensorART)*» - FP7-248763 - Large-scale Integrating Project Integrated Project (part funded by the European Commission).

- 2011**                                    **Research Committee of the University of Ioannina**  
Software analysis and development in the framework of the project NEOMARK (ICT Enabled Prediction of Cancer Reoccurrence) - FP7-2007- 2.5.3-ICT-224483 – STREP – (part funded by the European Commission).
- 2010 – 2012**                            **Municipality of Thermo Aitolokarnanias - Greece**  
Design, implementation and maintenance of the municipality of Thermo’s web portal (www.thermo.gov.gr)
- 2010**                                        **Research Committee of the University of Ioannina**  
Software analysis and development in the framework of the project POCEMON (Point-Of-Care MONitoring and Diagnostics for Autoimmune Diseases) - FP7-ICT-2007-216088 - Large-scale Integrating Project Integrated Project (part funded by the European Commission).
- 2009 – 2010**                            **Research Committee of the University of Ioannina**  
Technical Management of the project «New cardiovascular planning and diagnostic tool for coronary arteries in BSEC countries using computational simulation», Organization of the Black Sea Economic Cooperation.
- 2008 – 2010**                            **Foundation for Research & Technology / Biomedical Research Institute**  
Technical Manager of ARTreat (Multi-level patient-specific artery and atherogenesis model for outcome prediction, decision support treatment, and virtual hand-on training) - FP7-224297 - Large-scale Integrating Project Integrated Project (part funded by the European Commission)
- 2002 – 2004**                            **N.T.U.A. (National Technical University of Athens) Central Library**  
Digital Services Development at the N.T.U.A. Library – “ARIADNE” programme

## **Current / Previous Employment (Academic)**

- Academic Year 2018 - 2019**    **Technological Educational Institute of Western Greece.**  
University Fellow of Engineering Informatics Division TE, teaching the courses: « Telecommunication Systems I », « Telecommunication Systems II», « Introduction to Database Systems » and «Cloud Computing».
- Academic Year 2017 - 2018**    **Technological Educational Institute of Western Greece.**  
University Fellow of Engineering Informatics Division TE, teaching the courses: « Telecommunication Systems I », « Telecommunication Systems II», « Introduction to Database Systems » and «Cloud Computing».
- Academic Year 2016 - 2017**    **Technological Educational Institute of Western Greece.**  
University Fellow of Engineering Informatics Division TE, teaching the courses: « Telecommunication Systems I », « Telecommunication Systems II», « Introduction to Database Systems » and «Cloud Computing».

**Academic Year 2015 – 2016 Technological Educational Institute of Western Greece.**  
University Fellow of Engineering Informatics Division TE,  
teaching the courses: "Telecommunication Systems I",  
"Telecommunications Systems II", "Introduction to Database  
Systems" and "Cryptography".

**Academic Year 2014 - 2015 Technological Educational Institute of Western Greece.**  
University Fellow of Engineering Informatics Division TE,  
teaching the courses: "Telecommunication Systems I",  
"Telecommunications Systems II" and "Object Oriented  
Programming".

**Spring Semester 2013 – 2014 Technological Educational Institute of Western Greece**  
Lecturer of Engineering Informatics Division TE, teaching the  
laboratory course "Telecommunication Systems II" of V  
semester.

**Winter Semester 2013 – 2014 Technological Educational Institute of Western Greece**  
Lecturer of Engineering Informatics Division TE, teaching the  
laboratory course "Telecommunication Systems II" of IV  
semester.

**Spring Semester 2012 – 2013 Technological Educational Institute of Western Greece**  
Lecturer of Telecommunication Systems and Networks  
Department, teaching the laboratory course "Safety and Reliability  
Network Systems" of VI semester as well as the laboratory course  
"Fiber Networks" of the VIII semester.

**Winter Semester 2012 – 2013 Technological Educational Institute of Messolonghi**  
Lecturer of Engineering Informatics Division TE, teaching the  
laboratory course "Digital TV" of VIII semester.

**Winter Semester 2012 – 2013 Technological Educational Institute of Messolonghi**  
Lecturer of the Automation Division, teaching the laboratory  
course "Structured Programming - Language C» of the A  
semester.

## Workshops – Conferences – Journals – Books

- 2020 Tsakanikas VD, Gatsios D, Dimopoulos D, Pardalis A, Pavlou M, Liston MB and Fotiadis DI (2020) *Evaluating the Performance of Balance Physiotherapy Exercises Using a Sensory Platform: The Basis for a Persuasive Balance Rehabilitation Virtual Coaching System*. *Front. Digit. Health* 2:545885. doi: 10.3389/fdgth.2020.545885
- 2020 Ioannis Ballas, Vassilios Tsakanikas, Evaggelos Pefanis and Vassilios Tampakas, “Assessing the computational limits of GraphDBs’ engines - A comparison study between Neo4j and Apache Spark”, PCI 2020 - 24th Pan-Hellenic Conference on Informatics
- 2020 Kostas M. Tsiouris, Dimitrios Gatsios, Vassilios Tsakanikas, Athanasios A. Pardalis, Ioannis Kouris, Thelma Androutsou, Marilena Tarousi, Natasa Vujnovic Sedlar, Iason Somarakis, Fariba Mostajeran, Nenad Filipovic, Harm op den Akker, Dimitrios D. Koutsouris & Dimitrios I. Fotiadis (2020) *Designing interoperable telehealth platforms: bridging IoT devices with cloud infrastructures*, *Enterprise Information Systems*, DOI: 10.1080/17517575.2020.1759146
- 2020 C. P. Antonopoulos, G. Keramidas, V. Tsakanikas, E. Faliagka, C. Panagiotou and N. Voros, "Capacity Building Among European Stakeholders In the Areas of Cyber-Physical Systems, IoT & Embedded Systems: The SMART4ALL Digital Innovation Hub Perspective," 2020 IEEE Computer Society Annual Symposium on VLSI (ISVLSI), Limassol, Cyprus, 2020, pp. 464-469, doi: 10.1109/ISVLSI49217.2020.00-13.
- 2020 V. D. Tsakanikas et al., "A deep learning oriented method for automated 3D reconstruction of carotid arterial trees from MR imaging," 2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), Montreal, QC, Canada, 2020, pp. 2408-2411, doi: 10.1109/EMBC44109.2020.9176532.
- 2020 Eleni I. Georga ; Dimitrios Gatsios ; Vasilis Tsakanikas et al., "A Dynamic Bayesian Network Approach to Behavioral Modelling of Elderly People during a Home-based Augmented Reality Balance Physiotherapy Programme," 2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), Montreal, QC, Canada, 2020, pp. 5544-5547, doi: 10.1109/EMBC44109.2020.9175435
- 2020 Alexandra Gheondea-Eladi, Mark Verhijde, Mousa Albashrawi, Vassilis Tsakanikas and Vassilis Triantafyllou, *An Operationalization For Collecting Experts Opinions On The Design Of An E-Deliberation Tool*, esociety 2020, ISBN : 978-989-8704-14-6
- 2019 Triantafyllou, V., Tsakanikas, V., Asimakopoulos, G., & Christodoulopoulos, J. (2019) *Public online deliberation System (PODS)*, 17<sup>th</sup> International Conference e-Society, Utrecht, The Netherlands
- 2019 Triantafyllou, V., Tsakanikas, V., Asimakopoulos, G., & Christodoulopoulos, J. (2019, June). *PODS: Towards a generic, public deliberation system*. In *Proceedings of the 20th Annual International Conference on Digital Government Research* (pp. 499-501).

- 2017 Tsakanikas, V., & Dagiuklas, T. (2017). Video surveillance systems-current status and future trends. *Computers & Electrical Engineering*. (doi.org/10.1016/j.compeleceng.2017.11.011)
- 2016 Giorgos Giannakakis, Matthew Pediaditis, George Stavrinidis, George Konstantinidis, Vangelis Kritsotakis, Vasilis Tsakanikas, Michael Ligerakis, Vangelis Sakkalis, Pelagia Vorgia, Manolis Tsiknakis, «*A computational platform for continuous seizure anticipation, monitoring and clinical evaluation*». 13<sup>th</sup> International Conference on Wearable, Micro & Nano Technologies for Personalized Health, 29-31 May, FORTH, Heraklion, Crete, Greece
- 2014 Βασίλειος Τσακανίκας, Γεώργιος Τσαπακίδης, «Από τη Λογική στην Άλγεβρα Boole και από την Άλγεβρα Boole στα Λογικά Κυκλώματα», 31<sup>ο</sup> Συνέδριο Μαθηματικής Παιδείας, πρακτικά σελ 930-939
- 2013 Lambros S. Athanasiou, Petros S. Karvelis, Antonis I. Sakellarios, Themis P. Exarchos, Panagiotis K. Siogkas, Vassilis D. Tsakanikas, Katerina K. Naka, Christos V. Bourantas, Michail I. Papafaklis , Georgia Koutsouri, Lampros K. Michalis, Oberdan Parodi and Dimitrios I. Fotiadis, “*A hybrid plaque characterization method using intravascular ultrasound images*”. Technology and Health Care 21 (2013) 199–216, IOS Press
- 2012 Antonis I. Sakellarios, Kostas Stefanou, Panagiotis Siogkas, Vasilis D. Tsakanikas, Christos V. Bourantas, Lambros Athanasiou, Themis P. Exarchos, Evaggelos Fotiou, Katerina K. Naka, Michail I. Papafaklis, Andrew J. Patterson, Victoria EL. Young, Jonathan H. Gillard, Lampros K. Michalis and Dimitrios I. Fotiadis, “*Novel methodology for 3D reconstruction of carotid arteries and plaque characterization, based upon magnetic resonance imaging carotid angiography data*”. Magnetic Resonance Imaging, 2012 Oct;30(8):1068-82
- 2012 Lambros S. Athanasiou, Petros S. Karvelis, Vasilis D. Tsakanikas, Katerina K. Naka, Lampros K. Michalis, Christos V. Bourantas and Dimitrios I. Fotiadis, “*A novel semi-automated atherosclerotic plaque characterization method using grayscale intravascular ultrasound images. Comparison with Virtual Histology*” IEEE Transactions on Information Technology in Biomedicine (TITB), 2012 May;16(3):391-400
- 2011 Simon D. Thackray, Christos V. Bourantas, Poay H. Loh, Vasilios D. Tsakanikas, Dimitrios I. Fotiadis, “*Optical Coherence Tomography: Image interpretation and image processing methodologies*” Chapter in IGI Global, Release Date: October, 2011, DOI: 10.4018/978-1-61350-095-8, ISBN10: 1613500955
- 2011 Vasilios D. Tsakanikas, Lampros K. Michalis, Dimitrios I. Fotiadis, Katerina K. Naka, Christos V. Bourantas, “*Intravascular Imaging: Current Applications and Research Developments*” IGI Global, Release Date: October, 2011, DOI: 10.4018/978-1-61350-095-8, ISBN10: 1613500955
- 2011 Christos Bourantas, Vasilis Tsakanikas, Lampros Michalis, Katerina Naka, Dimitrios Fotiadis, Farqad Alamgir, “*Fusion of optical coherence tomography and coronary angiography - in vivo assessment of shear stress in plaque rupture*” International Journal of Cardiology 2012 Mar 8;155(2):e24-6

- 2010 Panagiotis K. Siogkas, Antonis I. Sakellarios, Kostas A. Stefanou, Vasilis D. Tsakanikas, Themis P. Exarchos, Lambros K. Michalis, Katerina K. Naka, Catrin Bludszweit-Philipp and Dimitrios I. Fotiadis, “*Quantification of the Effect of Percutaneous Coronary Angioplasty on a Stenosed Right Coronary Artery*”  
10<sup>th</sup> IEEE International Conference on Information Technology and Applications in Biomedicine, November 3-5, 2010, Corfu, Greece
- 2010 Oberdan Parodi, Paolo Marraccini, Vasilis Tsakanikas, Dimitrios I. Fotiadis, Nenad Filipovic, “*Atherosclerosis progression in human coronary arteries assessed by ARTreat modeling: pathophysiological insights by a patient-specific approach*”  
10<sup>th</sup> IEEE International Conference on Information Technology and Applications in Biomedicine, November 3-5, 2010, Corfu, Greece
- 2010 L.S. Athanasiou, P.S. Karvelis, V.D. Tsakanikas, K.A. Stefanou, K.K. Naka, L.K. Michalis, G.A. Rigas and D.I. Fotiadis, “*Atherosclerotic Plaque Characterization Using Geometrical Features from Virtual Histology Intravascular Ultrasound Images*”  
10<sup>th</sup> IEEE International Conference on Information Technology and Applications in Biomedicine, November 3-5, 2010, Corfu, Greece
- 2010 P. Siogkas, A. Sakellarios, K. Stefanou, V. Tsakanikas, K. Naka, D. Fotiadis, L. Michalis, “*Blood flow modeling in a atherosclerotic 3D arterial model with deformable walls*”  
31<sup>st</sup> Panhellenic Cardiological Congress, 21-23 October 2010, Greece, Athens
- 2010 L. Athanasiou, P. Karvelis, V. Tsakanikas, K. Naka, N. Papamichail, C. Bourantas, D. Fotiadis, L. Michalis, “*Fully automatic plaque characterization on coronary arteries using Intravascular Ultrasound images*”  
31<sup>st</sup> Panhellenic Cardiological Congress, 21-23 October 2010, Greece, Athens
- 2010 George Xylomenos, Konstantinos Katsaros and Vasilis Tsakanikas, *Support of Multiple Content Variants in the Multimedia Broadcast / Multicast Service*, International Journal of Communication Systems, International Journal of Communication Systems, 24 (6), June 2011, p. 691-708, John Wiley and Sons Ltd. Chichester, UK
- 2010 Antonis I. Sakellarios, Panagiotis K. Siogkas, Vasilis D. Tsakanikas, Kostas A. Stefanou, Katerina K. Naka, Lampros K. Michalis, Dimitrios I. Fotiadis, “*Blood Flow Simulation in 3D Patient-Specific MRI Reconstructed Carotid Arteries*”  
International VPH Conference, VPH2010, 30<sup>th</sup> September to 1<sup>st</sup> October, 2010
- 2010 Antonis I. Sakellarios, Panagiotis K. Siogkas, Vasilis D. Tsakanikas, Kostas I. Stefanou, Lampros K. Michalis, Dimitrios I. Fotiadis, “*Simulation of the effect of tachycardia on atherosclerotic plaque development based on the LDL transport in coronary arteries.*”  
2010 Computing in Cardiology conference , Belfast, Northern Ireland, United Kingdom, 26<sup>th</sup>-29<sup>th</sup> September 2010
- 2010 Antonis I. Sakellarios, Panagiotis K. Siogkas, Vasilis D. Tsakanikas, Katerina K. Naka, Lampros K. Michalis, Dimitrios I. Fotiadis, “*Computational model of atherosclerotic plaque formation in 3D coronary arterial tree of realistic geometry*”  
ELEMBIO 2010, Ioannina, 4 - 6 June 2010
- 2010 Panagiotis K. Siogkas, Antonis I. Sakellarios, Kostas A. Stefanou, Themis, P. Exarchos, Vasilis D. Tsakanikas, Lampros K. Michalis, Katerina K. Naka, Michael I. Papafaklis, Christos V. Bourantas and Dimitrios I. Fotiadis, “*Blood flow in coronary arteries with deformable walls*”

- 2010 Evaggelos Karvounis, Vasilis D. Tsakanikas, Evangelos Fotiou, Dimitrios I. Fotiadis, “*ART-ML - a novel XML format for the biological procedures modeling and the presentation of blood flow simulation*”  
32<sup>nd</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Conf Proc IEEE Eng Med Biol Soc. 2010;2010:1490-3, Buenos Aires, Argentina
- 2009 Nenad Filipovic, Milos Kojic, Vasilis Tsakanikas, Dimitris Fotiadis, “*Prediction Of Plaque Development In Coronary Arteries Using Coupling FE and DPD Method*”  
ICCB2009, Italy 16-18 Sept, 2009
- 2009 A. Sakellarios, V. Tsakanikas, L. Michalis, D. Fotiadis, N. Filipovic. “*A tool for the automated processing of artery imaging modalities and modelling of atherosclerotic plaque development*”  
Computer Assisted Radiology and Surgery (CARS2009), 23<sup>rd</sup> – 27<sup>th</sup> June 2009, Berlin, Germany
- 2009 Stefanos D. Petsios, Antonis I. Sakellarios, Vasilis D. Tsakanikas, Dimitrios I. Fotiadis, “*A method for atherosclerotic plaque growth based on a markup representation of blood flow*”  
17<sup>th</sup> Annual International Conference on Intelligent Systems for Molecular Biology (ISMB) & 8<sup>th</sup> European Conference on Computational Biology (ECCB) 2009, Stocholm, June 27<sup>th</sup> - July 2<sup>nd</sup>
- 2009 A. Sakellarios, Vasilis D. Tsakanikas, Nenad D. Filipovic, Lambros K. Michalis. “*ARTool: A platform for atherosclerosis multi-level modelling*”  
2<sup>nd</sup> South East European Conference on Computational Mechanics
- 2007 Xylomenos G., Tsakanikas V., Polyzos G.C. “*Reducing the Transmission Power Requirements of the Multimedia Broadcast / Multicast Service*”  
Mobile and Wireless Communications Summit, 2007. 16<sup>th</sup> IST
- 2006 M. Christopoulou, V. Triantos, V. Tsakanikas, K.S. Nikita, “*Power Absorption characteristics in realistic adult and numerically derived child head models induced by Helically Equipped Mobile Phone: a parametric and comparative study*”  
Cost281 Workshop, Graz, April 2006.
- 2006 Maria Christopoulou, Vassilis Triantos, Vassilis Tsakanikas, Stavros Koulouridis, Konstantina Nikita, “*SAR distribution in children heads exposed to helical antennas*”, Scientific Workshop organized by the Forschungsgemeinschaft Funk e.V. (FGF), Research Association for Radio Applications, in cooperation with the State Ministry of Environment and Transport, Baden-Wurtemberg , “*Do children represent a special sensitive group for EMF-Exposure? -State of Research*”, Stuttgart, Germany, 27<sup>th</sup> 28<sup>th</sup> November 2006



## **Foreign Languages**

1997            English – Very Good  
                  Certificate of Lower in English, University of Cambridge

## **Informatics Related Background**

- Programming Languages: Fortran, Pascal, C, C++ (openCV, aquila, sigPack), Java, Python, Perl, VB, 8085/8086 Assembly, SQL, JavaScript, PHP, JSP, Matlab, R
- Networking: TCP/IP, RTP-RTCP, IEEE 801.x, OPNET, ns2
- Programming Environments: Visual Studio 2015, Netbeans
- Programming Patterns: WPF, MVVM, Silverlight
- Software Suites: Pspice, HP ADS, SuperNec, DreamWeaver
- Operating Systems: Windows (98, 2000, NT, XP, Vista. 10), UNIX, Linux, Android

## **Scholarships**

2005 – 2006            Scholarship for excellent performance during the 1o and 2o semester of the MSc in Computer Science

## **Societies**

2006 – Today            Member of Technical Chamber of Greece  
2010 – Today            Member of IEEE

## **Personal Interests**

- Cinema
- Music
- Travelling
- Literature