

# Curriculum Vitae

Giorgos Giannakakis

## Personal Information

Name Giorgos Giannakakis  
Date of Birth 15/12/1979 (Athens, Greece)  
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## Education

- 2005-2009 **Ph.D in Biomedical Engineering (Biomedical Electronics and Informatics)**  
School of Medicine, University of Patras - School of Electrical and Computer Engineering,  
National Technical University of Athens  
Degree: Excellent
- 2003-2005 **M.Sc in Biomedical Engineering**  
School of Medicine, University of Patras - School of Electrical and Computer Engineering,  
National Technical University of Athens  
Degree: 8.06/10
- 1998-2003 **Dipl.-Ing. in Electrical and Computer Engineering**  
School of Electrical and Computer Engineering, National Technical University of Athens  
Degree: 8.12/10

## Research experience

11/2012-today **Postdoctoral Research Associate**, Foundation for Research and Technology Hellas (FORTH),  
Institute of Computer Science.

**SeeFar**: Smart glasses for multifaceted visual loss mitigation and chronic disease prevention indicator for healthier, safer, and more productive workplace for ageing population. (H2020-SC1-DTH-2018-1, GA No 826429)

**UNICORN**: A framework for multi-cloud software fostering cloud technologies uptake from digital SMEs and startups. (H2020-ICT-2016, GA No 731846)

**SEMEOTICONS**: SEMEiotic Oriented Technology for Individual's Cardiometabolic risk self-assessment and Self-monitoring (FP7-ICT-2013, GA No 611516)

**Psychiatric Hospital Attica**: Design and development of information systems and support applications for technical support at PHA (Contract No. 2514/2015)

**General Hospital Athens Alexandra**: Design and development of information systems and support applications for technical support at GHA Alexandra (Contract No. 2548/2014)

**ICS/FORTH Program for MRI Software**: Requirements analysis and evaluation of magnetic resonance imaging (MRI) system for epileptic patients

**General Hospital Eleusina**: Design and development of information systems and support applications for technical support at GH Eleusina (Contract No. 1625/2016)

**General Hospital - KY Kithiron**: Design and development of information systems and support applications for technical support at GH-KY Kithiron (Contract No. 46/2014)

**General Hospital Rhodes, Kos, Kalumnos**: Design and development of information systems and support applications for technical support at GH Rhodes, Kos, Kalumnos (Contract No. 101/2014)

**University General Hospital Patras**: Design and development of information systems and support applications for technical support at UGH Patras (Contract No. 2218/2013)

**predictES**: An Integrated wearable platform predicting Epileptic Seizures and novel neurofeedback approaches in support of personalized patient management

**EURECA:** Enabling information re-Use by linking clinical Research and Care (FP7-ICT-2011, GA No 288048)

**CHIC:** Computational Horizons in Cancer, Developing Meta- and Hyper-Multiscale Models and Repositories for In Silico Oncology (FP7-ICT-2011, No 600841)

**INTERGRATE:** Driving Excellence in Integrative Cancer Research through Innovative Biomedical Infrastructures (FP7-ICT-2009, No 270253)

**P-Medicine:** From data sharing and integration via VPH models to personalized medicine (FP7-ICT-2009, No 270089)

04/2017-04/2019 **Scientific Advisor/Principal investigator**, Foundation for Research and Technology Hellas (FORTH), Institute of Computer Science.

Postdoctoral scholarship (Greek State Scholarships Foundation): Investigation of stress and psychological trauma through facial videos and biosignals.

07/2014-12/2014 **Postdoctoral Research Associate**, Technological Educational Institute of Crete.

MyHealthAvatar: A Demonstration of 4D Digital Avatar Infrastructure for Access of Complete Patient Information (FP7-ICT-2011, No 600929).

01/2006-12/2008 **Principal Investigator**, National Technical University of Athens (NTUA).

PENED 2003, Development of advanced computational algorithms and tools for the support of functional intervention in Parkinson disease and resistant epilepsy.

01/2005-04/2009 **Scientific Associate**, Institute of Communications and Computer Systems (ICCS).

02/2009-04/2009 Health effects of electromagnetic radiation and wireless communications.

04/2008-06/2008 INTERMED, An INTEgrated broadband telecommunication pilot teleservices-platform for improving health care provision in the Region of MEDiterranean.

04/2008-04/2008 iWebCare, Integrated Web services platform for the facilitation of fraud detection in health care e-government services.

07/2006-07/2006 Development of 4th generation Wireless Systems Resources' Management.

03/2006-06/2006 **Scientific Associate**, National Technical University of Athens (NTUA).

Provision of technical services of the work of transactions automation.

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## Professional experience

09/2004-today **Web developer**, Self employed.

Design and implementation of websites

- www.euzoea.com (technologies PHP, MySQL, Wordpress)
- www.apokinou.gr (technologies PHP, MySQL, Joomla)
- www.musicalinstruments.gr (technologies PHP, MySQL, Wordpress)
- www.mesarmi.gr (technologies PHP, MySQL, Wordpress)
- www.tangoneon.gr (technologies PHP, MySQL, Wordpress)
- www.chaniafestival.gr (technologies PHP, MySQL, Wordpress)
- www.hotels-kania.gr (technologies PHP, MySQL, AJAX, JQuery, Javascript, Google Maps, SEO)
- www.bibe2008.org (technologies PHP, MySQL)
- www.ontas.gr (technologies PHP, Google Maps)
- www.biosim.ntua.gr/smartdiab
- www.biosim.ntua.gr (technologies HTML/DHTML, SEO)

09/2010-10/2012 **Electrical Engineer**, Self employed.

Implementation of electromechanical works

02/2012-08/2012 Directorate of Technical Works of Chania Regional Unit.

Work: Building infrastructure improvement and EM fixtures of Kissamos Health Center

04/2011-04/2012 Region of Crete, Directorate of Technical Works.

Work: Addition of A' floor in childcare station of Municipality of Nea Kydonia

07/2009-08/2009 Engineer in place, *TYDK of Crete Region*.

Work: Lightning of Municipality Kantanou with traditional poles

04/2012-10/2012 **Programmer**, Medicines Du Monde (Chania Polyclinic), (voluntary work).

Design and implementation of clinic/pharmacy management web-based application (technologies php, mySQL, Ajax, JQuery)

08/2009-05/2010 **Soldier**, Compulsory Military Service at Hellenic Army.

10/2008-03/2009 **Analyst/Programmer**, University Mental Health Research Institute, (voluntary work).

Design and implementation of electroencephalographic recording system (NI Labview technology)

- 02/2007-06/2009 **Analyst/Programmer**, Hellenic Center of Neurosurgical Research.  
Design, implementation and support of a web-based data management and analysis system for epileptic patients - EPILDA (JSP, JBoss 4, MS SQL Server technologies)
- 02/2004-06/2009 **Ph.D Candidate**, Laboratory Assistance at Biomedical Simulations and Imaging (BIOSIM).
  - Measurements Supervisor: Measurements of electromagnetic radiation levels (RF) in regions being in the proximity of base stations of mobile communications system
  - Webmaster of the lab website (www.biosim.ntua.gr)
  - Writing and implementation of research projects
- 10/2006-12/2008 **Instructor**, "System" consultant company.  
Statistics seminars
- 09/2005-02/2008 **Instructor**, "KEK Parthenon" Computer Studies.  
Informatics seminars
- 07/2005-08/2005 **Instructor**, MEMO Computers.  
Informatics seminars
- 03/2004-06/2004 **Instructor**, "IEK Domi" Computer Studies.  
Programming Languages (Java, Javascripts, C++) seminars
- 2000-2003 Work in Technical Office during summer months.

## Teaching experience

### Teaching work in higher/university education

Teaching work in 4 different universities 2 postgraduate και 14 undergraduate lessons. The total non overlapping teaching experience is 6.5 years (13 semesters).

- 03/2019-today **Associate Lecturer**, Bioinformatics and Neuroinformatics, Hellenic Open University.  
Recording and Processing of Neural Biosignals
- 03/2018-07/2018 **Visiting Lecturer**, Computer Science Department, University of Crete.  
Pattern Recognition
- 10/2012-02/2018 **Adjunct Laboratory Collaborator/Instructor**, Department of Informatics Engineering TE, Technological Educational Institute of Crete.  
Course:  
Machine Vision (winter 2014, winter 2016)  
Laboratories:  
Machine Vision (winter 2014, winter 2017)  
Telemedicine (spring 2013)  
Multimedia Applications in Healthcare (winter 2013)  
Digital Signal Processing (winter 2012, spring 2016)
- 10/2014-02/2015 **Adjunct Laboratory Collaborator/Instructor**, Department of Nursing, Technological Educational Institute of Crete.  
Biosignals Processing  
Informatics I
- 10/2012-02/2013 **Adjunct Scientific Collaborator/Instructor**, Department of Music Technology and Acoustics, Technological Educational Institute of Crete.  
Course: Multimedia Applications  
Laboratory: Multimedia Applications
- 03/2012-07/2012 **Adjunct Lecturer**, Department of Production Engineering and Management, Division of Management and Administration, Technical University of Crete.  
Algorithms and Data Structures (Lab assignments in C)
- 10/2010-07/2012 **Adjunct Scientific Collaborator/Instructor**, Department of Electronics, Technological Educational Institute of Crete.  
Course:  
Digital Control Systems (spring 2012)  
Laboratories:  
Signals and Systems (spring 2012)  
Digital Control Systems (spring 2011, spring 2012)  
Digital Signal Processing (winter 2010, spring 2011)  
Robotics (winter 2010)  
Electrical and Electronic Measurements (winter 2010 - spring 2011)

- 03/2005-07/2005, **Teaching Assistant**, School of Electrical and Computer Engineering, NTUA.  
 2006, 2007, 2008, Supervision of semester projects  
 2009 Postgraduate Course in Biomedical Engineering  
 “Bioelectromagnetism”
- 09/2006-02/2007 **Teaching Assistant**, School of Electrical and Computer Engineering, NTUA.  
 09/2007-02/2008 Supervision of lab assignments during undergraduate courses  
 “Simulation of Physiological Systems”  
 “Biomedical Engineering Laboratory”

### Students’ Advisor

Co-advisor of total nine (9) theses: four (4) postgraduate these and five (5) undergraduate theses.

- 04/2019-02/2020 Co-Advisor of undergraduate thesis, «*Compressed Sensing Methods for Analysis of Epileptic Seizures*», Tsekos Nikolaos, Technical University of Crete, 2019
- 09/2015-10/2016 Co-Advisor of M.Sc. thesis, «*Exploring eye activity as an indication of emotional state*», Tzedakis Charalampos, TEI Crete, 2016
- 06/2015-03/2016 Co-Advisor of undergraduate thesis, «*Cognitive processes information extraction via EEG*» (in Greek), Grigoriadis Dimitris, TEI Crete, 2016
- 03/2014-09/2015 Co-Advisor of undergraduate thesis, «*Driver Drowsiness Detection via Eye Characteristics Extracted from Videos*» (in Greek), Asargiotakis Kostas, TEI Crete, 2015
- 04/2013-10/2013 Co-Advisor of undergraduate thesis, «*Magnetoencephalographic Analysis using Projection on Independent Components (ICA)*» (in Greek), Antonakakis Marios, TUC, 2013
- 09/2009-07/2010 Co-Advisor of M.Sc. thesis, «*Non Linear Analysis of EEG Causal Interactions*» (in Greek), Korda Alexandra, NTUA, 2010.
- 09/2008-07/2009 Co-Advisor of M.Sc. thesis, «*Extraction of Quantitative Synchronization Measures of Cerebral Activity*» (in Greek), Lekkas Alexandros, NTUA, 2009.
- 09/2008-07/2009 Co-Advisor of M.Sc. thesis, «*EEG Study Based on Information Theory measures*» (in Greek), Xenikou Monika-Filitsa, NTUA, 2009.
- 02/2006-07/2006 Co-Advisor of undergraduate thesis, «*Brain Regions Connectivity Study using computational methods and EEG data*» (in Greek), Skoularikis Grigoris, NTUA, 2006.

### Language Skills

Greek	Native Speaker	Native Language
English	Fluent	Cambridge Certificate of Proficiency in English (Grade C)
German	Conversant	Zertifikat Gesamnote Gut (101.75/120)

### Technical skills

Programming Languages	MATLAB, C/C++, Java Fortran, Prolog, Python	Web Development	HTML/HTML5, PHP, Javascript, JSP, AJAX, JQuery, XML, CSS/CSS3, WordPress, Google Maps API
Databases	MS SQL Server, MySQL	Statistics	SPSS
Operating Systems	Windows XP/Vista/7/8/10, Linux Ubuntu	Office automation	Microsoft Office, $\LaTeX$
Graphic Design	Adobe Photoshop, Premiere, Flash	Other	NI Labview

### Publications

#### Refereed Journal publications

- [J1] G. Giannakakis, D. Grigoriadis, K. Giannakaki, O. Simantiraki, A. Roniotis, and M. Tsiknakis. Review on psychological stress detection using biosignals. *IEEE Transactions on Affective Computing*, 2019. (IF: 6.288).
- [J2] G. Giannakakis, M. Tsiknakis, and P. Vorgia. Focal epileptic seizures anticipation based

on patterns of heart rate variability parameters. *Computer Methods and Programs in Biomedicine*, 178:123-133, 2019. (IF: 3.424).

- [J3] P. Henriquez, B.J. Matuszewski, Y. Andreu-Cabedo, L. Bastiani, S. Colantonio, ..., A. Bjorgan, G. Giannakakis, M. Pediaditis, F. Chiarugi, E. Christinaki, K. Marias, and M. Tsiknakis. Mirror mirror on the wall... an unobtrusive intelligent multisensory mirror for well-being status self-assessment and visualisation. *IEEE Transactions on Multimedia*, 19(7):1467-1481, July 2017. (IF: 5.452).
- [J4] G. Giannakakis, M. Pediaditis, D. Manousos, E. Kazantzaki, F. Chiarugi, P.G. Simos, K. Marias, and M. Tsiknakis. Stress and anxiety detection using facial cues from videos. *Biomedical Signal Processing and Control*, 31:89-101, 2017. (IF: 2.943) (**Top 20 most-cited articles in the BSPC journal**).
- [J5] G. Stavriniadis, K. Michelakis, V. Kontomitrou, G. Giannakakis, M. Sevrisianos, G. Sevrisianos, N. Chaniotakis, Y. Alifragis, and G. Konstantinidis. Su-8 microneedles based dry electrodes for electroencephalogram. *Microelectronic Engineering*, 159:114-120, 2016. (IF: 1.654).
- [J6] Y. Andreu, F. Chiarugi, S. Colantonio, G. Giannakakis, G. Giorgi, P. Henriquez, E. Kazantzaki, D. Manousos, K. Marias, MA. Matuszewski, BJ. Pascali, M. Pediaditis, G. Raccichini, and M. Tsiknakis. Wize mirror - a smart, multisensory cardio-metabolic risk monitoring system. *Computer Vision and Image Understanding*, 148:3-22, 2016. (IF: 2.645).
- [J7] C. Papageorgiou, A.D. Rabavilas, X. Stachteia, G.A. Giannakakis, M. Kyprianou, G.N. Papadimitriou, and C.N. Stefanis. The interference of introversion-extraversion and depressive symptomatology with reasoning performance: A behavioural study. *Journal of Psycholinguistic Research*, 41(2):129-139, 2012. (IF: 0.659).
- [J8] C. Papageorgiou, G.A. Giannakakis, K.S. Nikita, D. Anagnostopoulos, G.N. Papadimitriou, and A. Rabavilas. Abnormal auditory ERP N100 in children with dyslexia: comparison with their control siblings. *Behavioral and Brain Functions*, 5, 2009. (IF: 2.457).
- [J9] J. Stoitsis, G.A. Giannakakis, C. Papageorgiou, K.S. Nikita, A. Rabavilas, and D. Anagnostopoulos. Evidence of a posterior cingulate involvement Brodmann area 31 in dyslexia: a study based on source localization algorithm of event-related potentials. *Progress Neuropsychopharmacology Biological Psychiatry*, 32(3):733-738, April 2008. (IF: 4.315).
- [J10] C. Papageorgiou, D. Anagnostopoulos, G.A. Giannakakis, K. Sakelariou, N. Tsiapas, P. Paraskevopoulou, K. Nikita, A. Rabavilas, and C. Soldatos. Preattentive deficits in developmental disorders of scholastic skills. *Neuroreport*, 16(16):1829-32, November 2005. (IF: 1.266).

### Book Chapters

- [B1] G. Giannakakis, V. Sakkalis, M. Pediaditis, and M. Tsiknakis. Methods for Seizure Detection and Prediction: An Overview. *Neuromethods*, Springer New York, 91:131-157, 2015.

### Conference publications

- [C1] G. Papadakis, G. Giannakakis, A.H. Karantanas, K. Marias, M.T. Collins, and A.M. Boyce. <sup>18</sup>F-NaF uptake by fibrous dysplasia lesions in the skull is significantly higher in patients with optic neuropathy. In *33rd Annual Congress of the European Association of Nuclear Medicine*, 2020.
- [C2] G. Giannakakis, A. Plataniotis, G.M. Kalatzantonakis-Jullien, E. Georgiou, E. Thanou, and D. Kalles. Arousal assessment during arithmetic mental task using EEG recordings. In *Society of Applied Neurosciences conference (SAN2020)*, Thessaloniki, Greece, 17-20 September 2020.
- [C3] P. Vorgia, K. Giannakaki, N. Tsekos, G. Giannakakis, and M. Zervakis. Automatic focal epileptic seizures detection using common spatial patterns (CSP) methodology. In *14<sup>th</sup> European Congress on Epileptology (ECE)*, Geneva, Switzerland, 5-9 July 2020.

- [C4] G. Giannakakis, M.R. Koujan, A. Roussos, and K. Marias. Automatic stress detection evaluating models of facial action units. In *13<sup>th</sup> IEEE Conference on Automatic Face and Gesture Recognition (FG2020)*, Buenos Aires, Argentina, 18-22 May 2020.
- [C5] M.R. Koujan, L. Alharbawee, G. Giannakakis, N. Pugeault, and A. Roussos. Real-time facial expression recognition “In The Wild” by disentangling 3D expression from identity. In *13<sup>th</sup> IEEE Conference on Automatic Face and Gesture Recognition (FG2020)*, Buenos Aires, Argentina, 18-22 May 2020.
- [C6] G. Giannakakis, N. Tsekos, K. Giannakaki, K. Michalopoulos, P. Vorgia, and M. Zervakis. Seizure detection using common spatial patterns and classification techniques. In *19<sup>th</sup> IEEE International Conference on Bioinformatics and Bioengineering (BIBE)*, Athens, Greece, 28-30 October 2019.
- [C7] K. Giannakaki, G. Giannakakis, P. Vorgia, M. Klados, and M. Zervakis. Automatic absence seizure detection evaluating matching pursuit features of EEG signals. In *19<sup>th</sup> IEEE International Conference on Bioinformatics and Bioengineering (BIBE)*, Athens, Greece, 28-30 October 2019.
- [C8] G. Giannakakis, N. Stefanakis, A. Ilias, and P. Simos. Evaluation of social and cognitive load stress detection using speech-derived features. In *8th International Conference on Computational Bioengineering (ICCB2019)*, Belgrade, Serbia, 4-6 September 2019.
- [C9] G. Giannakakis, E. Trivizakis, M. Tsiknakis, and K. Marias. A novel multi-kernel 1d convolutional neural network for stress recognition from ECG. In *8th International Conference on Affective Computing and Intelligent Interaction (ACII 2019)*, Cambridge, UK, 3-6 September 2019. (27% acceptance rate).
- [C10] G. Giannakakis, K. Marias, and M. Tsiknakis. A stress recognition system using HRV parameters and machine learning techniques. In *8th International Conference on Affective Computing and Intelligent Interaction (ACII 2019)*, Cambridge, UK, 3-6 September 2019. (27% acceptance rate).
- [C11] P. Vorgia, G. Giannakakis, S. Voutoufianakis, D. Champsas, E. Dimitriou, and M. Tsiknakis. Focal epileptic seizures anticipation based on heart rate variability features. In *Epilepsia*, 59 (Suppl. 3), p. 269, *13<sup>th</sup> European Congress on Epileptology (ECE)*, Vienna, 26-30 August 2018.
- [C12] D. Melhart, K. Sfikas, G. Giannakakis, G. Yannakakis, and A. Liapis. A study on affect model validity: Nominal vs ordinal labels. In *2018 IJCAI workshop on AI and Affective Computing*, Stockholm, Sweden, 16-19 July 2018.
- [C13] G. Giannakakis, D. Manousos, P. Simos, and M. Tsiknakis. Head movements in context of speech during stress induction. In *13<sup>th</sup> IEEE Conference on Automatic Face and Gesture Recognition (FG2018)*, Xi’an, China, 16-19 May 2018.
- [C14] G. Giannakakis, D. Manousos, and M. Tsiknakis. Evaluation of head pose features for stress detection and classification. In *IEEE Conference on Biomedical and Health Informatics (BHI)*, Las Vegas, USA, 4-7 March 2018.
- [C15] K. Giannakaki, G. Giannakakis, C. Farmaki, and V. Sakkalis. Emotional state recognition using advanced machine learning techniques on EEG data. In *30<sup>th</sup> IEEE International Symposium on Computer-Based Medical Systems*, Thessaloniki, 22-24 June 2017.
- [C16] O. Simantiraki, G. Giannakakis, A. Pampouchidou, and M. Tsiknakis. Stress detection from speech using spectral slope measurements. In *MINDCARE2016, 6<sup>th</sup> EAI International Symposium on Pervasive Computing Paradigms for Mental Health*, Barcelona, 28-29 November 2016.
- [C17] A. Pampouchidou, O. Simantiraki, A. Fazlollahi, M. Padiaditis, D. Manousos, A. Roniotis, G. Giannakakis, F. Meriaudeau, P. Simos, K. Marias, F. Yang, and M. Tsiknakis. Depression assessment by fusing high and low level features from audio, video, and text. In *6<sup>th</sup> International Workshop on Audio/Visual Emotion Challenge (AVEC ’16)*, 2016.
- [C18] G. Giannakakis, M. Padiaditis, G. Stavriniadis, G. Konstantinidis, V. Kritsotakis, V. Tsakanikas, M. Ligerakis, V. Sakkalis, P. Vorgia, and M. Tsiknakis. A computational platform for continuous

- seizure anticipation monitoring and clinical evaluation. In *13<sup>th</sup> International Conference on Wearable, Micro and Nano Technologies for Personalized Health*, Heraklion, 29-31 May 2016.
- [C19] G. Giannakakis, P. Vorgia, S. Voutoufianakis, M. Pediaditis, D. Champsas, and M. Tsiknakis. Low frequency preictal EEG waves preceding epileptic seizures originating from right frontal lobe. In *Epilepsia*, 56(Suppl. 1), p. 94, *31<sup>st</sup> International Epilepsy Congress (IEC)*, Istanbul, 5-9 September 2015.
- [C20] G. Giannakakis, D. Grigoriadis, and M. Tsiknakis. Detection of stress/anxiety state from EEG features during video watching. In *37<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology (EMBC)*, Milano, Italy, 25-29 August 2015.
- [C21] M. Pediaditis, G. Giannakakis, F. Chiarugi, D. Manousos, A. Pampouchidou, E. Christinaki, G. Iatraki, E. Kazantzaki, P. Simos, K. Marias, and M. Tsiknakis. Extraction of facial features as indicators of stress and anxiety. In *37<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology (EMBC)*, Milano, Italy, 25-29 August 2015.
- [C22] Y. Andreu-Cabedo, P. Castellano, S. Colantonio, G. Coppini, R. Favilla, D. Germanese, G. Giannakakis, D. Giorgi, M. Larsson, and P. Marraccini. Mirror mirror on the wall... an intelligent multisensory mirror for well-being self-assessment. In *IEEE International Conference on Multimedia and Expo (ICME)*, Torino, Italy, 29 June-3 July 2015.
- [C23] E. Christinaki, G. Giannakakis, F. Chiarugi, M. Pediaditis, G. Iatraki, D. Manousos, K. Marias, and M. Tsiknakis. Comparison of blind source separation algorithms for optical heart rate monitoring. In *4<sup>th</sup> International Conference on Wireless Mobile Communication and Healthcare*, Athens, Greece, 3-5 November 2014.
- [C24] P. Vorgia, S. Voutoufianakis, D. Champsas, V. Kritsotakis, M. Pediaditis, G. Giannakakis, E. Dimitriou, E. Matzourani, and M. Tsiknakis. Presentation study for the development of non invasive epileptic seizure prediction device and electronic health medical record of epileptic patients. In *9<sup>th</sup> Panhellenic Congress of Epilepsy*, Athens, Greece, 17-19 October 2014.
- [C25] F. Chiarugi, G. Iatraki, E. Christinaki, D. Manousos, G. Giannakakis, M. Pediaditis, A. Pampouchidou, K. Marias, and M. Tsiknakis. Facial signs and psycho-physical status estimation for well-being assessment. In *7<sup>th</sup> International Conference on Health Informatics*, Angers, France, 3-6 March 2014.
- [C26] M. Antonakakis, G. Giannakakis, M. Tsiknakis, S. Micheloyannis, and M. Zervakis. Synchronization coupling investigation using ICA cluster analysis in resting MEG signals in reading difficulties. In *13<sup>th</sup> IEEE International Conference on Bioinformatics and Bioengineering (BIBE)*, Chania, Greece, 10-13 November 2013.
- [C27] P. Vorgia, G. Giannakakis, V. Sakkalis, M. Pediaditis, C. Farmaki, S. Voutoufianakis, and M. Tsiknakis. Absence detection using approximate entropy. In *8<sup>th</sup> Panhellenic Congress of Epilepsy*, Thessaloniki, Greece, 18-20 October 2013.
- [C28] G. Giannakakis, V. Sakkalis, M. Pediaditis, C. Farmaki, P. Vorgia, and M. Tsiknakis. An approach to absence epileptic seizures detection using approximate entropy. In *35<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology (EMBC)*, Osaka, Japan, 3-7 July 2013.
- [C29] V. Sakkalis, G. Giannakakis, C. Farmaki, A. Mousas, M. Pediaditis, P. Vorgia, and M. Tsiknakis. Absence seizure epilepsy detection using linear and nonlinear EEG analysis methods. In *35<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology (EMBC)*, Osaka, Japan, 3-7 July 2013.
- [C30] K. Michalopoulos, V. Iordanidou, G.A. Giannakakis, K.S. Nikita, and M. Zervakis. Characterization of evoked and induced activity in EEG and assessment of intertrial variability. In *10<sup>th</sup> International Workshop on Biomedical Engineering*, Kos Island, Greece, 5-7 October 2011.
- [C31] I.I. Andreadis, G.A. Giannakakis, C. Papageorgiou, and K.S. Nikita. Detecting complexity abnormalities in dyslexia measuring approximate entropy of electroencephalographic signals. In *31<sup>st</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology (EMBC)*, Minneapolis, USA, 2-6 September 2009.

- [C32] G.A. Giannakakis, N.N. Tsiaparas, C. Papageorgiou, and K.S. Nikita. Spectral entropy of dyslexic ERP signal by means of adaptive optimal kernel. In *16<sup>th</sup> IEEE International Conference on Digital Signal Processing (DSP'09)*, pages 81-86, Santorini, Greece, 2009. IEEE Press.
- [C33] G.A. Giannakakis, N.N. Tsiaparas, M.-F.S. Xenikou, C.C. Papageorgiou, and K.S. Nikita. Wavelet entropy differentiations of event related potentials in dyslexia. In *8<sup>th</sup> IEEE International Conference on Bioinformatics and Bioengineering (BIBE)*, Athens, Greece, 8-10 October 2008.
- [C34] G.A. Giannakakis and K.S. Nikita. Estimation of time-varying causal connectivity on eeg signals with the use of adaptive autoregressive parameters. In *30<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology (EMBC)*, pages 3512-3515, Vancouver, Canada, 20-24 August 2008.
- [C35] G.A. Giannakakis, M. Vavatsioulas, C. Papageorgiou and K.S. Nikita. Statistical time-frequency differentiations of ERP in dyslexia using matching pursuit algorithm. In *6<sup>th</sup> European Symposium on Biomedical Engineering*, Chania, Greece, 19-21 June 2008.
- [C36] Giorgos Giannakakis. Localization of main intracranial sources of brain activity using parametric methods solving the inverse problem. In *20<sup>th</sup> Panhellenic Congress of Psychiatry*, Chersonisos, Crete, 14-18 May 2008.
- [C37] D. Anagnostopoulos, G. Giannakakis, J. Stoitsis, K. Nikita, C. Papageorgiou. Patterns of preattentive processing in children with dyslexia: A psychophysiological investigation. In *1<sup>st</sup> Eastern European Psychiatric Congress, Psychiatriki 18*, page 55 (Supplement 1), Thessaloniki, Greece, 21-23 September 2007.
- [C38] G. Giannakakis, J. Stoitsis, G. Trichopoulos, K. Nikita, Ch. Papageorgiou, D. Anagnostopoulos, A. Rabavilas, C. Soldatos. Investigation of specific learning difficulties on the information flow in multichannel EEG signals. In *5<sup>th</sup> European Symposium on Biomedical Engineering*, Patras, Greece, 7-9 July 2006.
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## Theses

- [T1] Γ. Γιαννακάκης. Ανάπτυξη μεθόδων ανάλυσης ηλεκτροεγκεφαλογραφήματος με χρήση μοντέλων συνδεσιμότητας και μεγεθών εντροπίας. Διδακτορική διατριβή, Ιατρική Σχολή Πανεπ. Πατρών - Σχολή Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών ΕΜΠ, 2009.
- [T2] Γ. Γιαννακάκης. Ανάλυση Ηλεκτροεγκεφαλογραφικού Σήματος με Εφαρμογές στην Επιληψία και τις Μαθησιακές Δυσκολίες. Μεταπτυχιακή διπλωματική εργασία, Ιατρική Σχολή Πανεπιστημίου Πατρών - Σχολή Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών ΕΜΠ, 2005.
- [T3] Γ. Γιαννακάκης. Ανάπτυξη Συστήματος Υποστήριξης Διάγνωσης Ψυχικών Ασθενειών με χρήση Προκλητών Εγκεφαλικών Δυναμικών. Προπτυχιακή διπλωματική εργασία, Σχολή Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών, ΕΜΠ, 2003.

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## Citations

Citations: **492**, h-index: **13**, i10-index: **19** (Google scholar)

Google scholar profile <https://scholar.google.gr/citations?user=AR8VwAMAAAAJ>



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## Awards - honors

- 2020 The article “Stress and anxiety detection using facial cues from videos” was included amongst the top 20 most-cited articles in the Biomedical Signal Processing and Control journal
- 2017-2019 Post-Doctoral Greek State scholarship (2 years) through the action entitled “Reinforcement of Postdoctoral Researchers”
- 2007 Thomaidio Award for the Progress of Arts and Sciences for the publication [C38]
- 2005 Thomaidio Award for the Progress of Arts and Sciences for the publication [J10]
- 2003 Award for the best NTUA interdisciplinary undergraduate thesis of year 2003 from Thomaidio Foundation

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## Organizational Activities

Member of organizing committee of IEEE International Conference on Imaging Systems and Techniques 2008 (Distinguished organization honor)

Member of organizing committee of IEEE 8<sup>th</sup> International Conference on Bioinformatics and BioEngineering 2008

Charter member of the cultural union Sampajana, Organization of the 1<sup>st</sup> Sampajana Jazz Festival, Chania, 26-29 June 2012

Member of organizing committee 8<sup>th</sup> International Conference on the Foundations of Digital Games, Chania, 14-17 May 2013

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## Scientific Activities

Member of the International Program Committee and Session Chairman in the 19<sup>th</sup> International Conference on Bioinformatics and BioEngineering 2019 (BIBE2019)

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## Reviewer

IEEE Transactions on Information Technology in Biomedicine (TITB)

IEEE Transactions on Computational Intelligence and AI in Games

IEEE Transactions on Affective Computing

Elsevier Biomedical Signal Processing and Control

Elsevier Computer Methods and Programs in Biomedicine

IEEE Journal of Biomedical and Health Informatics

Elsevier European Journal of Seizure

Epilepsia

PLOS One

IEEE Engineering in Medicine and Biology Conference (EMBC)

IEEE International Conference on Bioinformatics and Bioengineering (BIBE)

ACM International Conference on Multimodal Interaction (ICMI)

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## Scientific - Professional Societies

Member of the Technical Chamber of Greece

Member of Greek Company of Computer Scientists and Informatics

Educator certification from National Center of Certification

Member of the Chania Developers group

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## Personal Interests

Theatre Member of NTUA theatre team

2004: «Rosencrantz and Guildenstern are dead» by Tom Stoppard

2005: «Bremer Freiheit» by R. Fassbinder

2006: «Look at them» by M. Pontikas

2007: «Archangels Don't Play Pinball» by Dario Fo

Cinema 2012: Supporting actor in the film «The Two Faces of January» by Hossein Amini  
2016: Supporting actor in the short film «Loca» by Maria Papadaki

Music Accordion

Athletics Table tennis, Chess

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## Other

Car and motorcycle driver license

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## References

Available upon request

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