

Dr. Manousos KladosDept. of Psychology CITY

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WHAT STUDENTS AND COLLEAGUES SAY IN LINKEDIN

«It is my great pleasure to recommend Dr Manousos Klados. Dr Manousos was my personal tutor in my third year of university and he was able to aid me in the development of my 2nd year project involving the use of microprocessors to detect incoming falls of patients undergoing rehabilitation. When asked for help he is quick to understand and provide any help he can which in turn led to the success of my project.

I am very happy to recommend Dr Manousos Klados as both a tutor and lecturer.»

Ms. Ifeoma Nwankwo Biomedical Engineering Student at Aston University

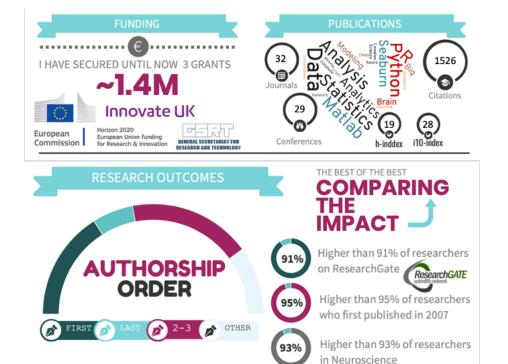
«I had Dr Klados as my lecturer for my BEng course. Dr Klados is a person who goes above and beyond in helping students think outside the box and pushes them to think in their unique way! He is definitely a passionate and a fun lecturer. I had a pleasure knowing Dr Klados!

Ms. Anam Ghuman Biomedical Engineering Student at Aston University

MANOUSOS A. KLADOS

MSC, PhD, FIMA, FHEA

ACHIEVEMENTS AT A GLANCE



EDUCATION

2017 – 2018	PGCert in Higher Education Aston University, Birmingham, UK
2010 – 2014	PhD in Medicine Aristotle University of Thessaloniki, Thessaloniki, Greece
2013 – 2013	Course in Computational Neuroscience
	University of Washington, USA
2007 – 2009	MSc in Medical Informatics Aristotle University of Thessaloniki, Thessaloniki, Greece
2001 – 2007	BSc in Mathematics Aristotle University of Thessaloniki, Thessaloniki, Greece

«I know Manousos since a while, in the framework of the organization of different conferences (SAN) and for scientific reasons during a preparation of an EU project (HOPE). I get a super impression of Manousos as a scientist and as a man: very well prepared in his job and in his knowledge of signal processing, he is also gentle and available with everybody. From a professional point of view, his realization of the project HOPE in the framework of the H2020-MSCA-RISE funding program was excellent. The project has been funded and I look forward to interacting with him across the next four years of scientific cooperation in the area of biomedical signal processing. It will be a very interesting scientific trip. »

> Prof. Fabio Babiloni Prof. of Industrial Neuroscience and Neuromarketing at Univ. Of Rome «Sapienza»

«I had an excellent expirience in working with Manousos during SAN conferences, where he was one of the effective organizer. Then our collaboration was prolonged when Prof. Manousos Klados edited my manuscripts in Frontiers of Human neurosciense»

> Prof. Olga Bazanova Institute of molecular biology and biophysics, Siberian branch of Rusian academy of science

«I was fortunate enough to have Dr Manousos Klados as my final year project supervisor. Without his ongoing support and encouragement; the successful completion of the project would not have been possible. His door was always open if ever I needed any advise or had any problems. I greatly benefited from his expertise within the field and his keen interest for teaching.»

Ms. Natasha Rupasinghe Student at Aston University

«Manousos is a dedicated academic, being both a passionate educator and a focused researcher. »

> Prof. Jame Wolffsohn Associate Pro-Vice Cancellor at Aston University

CURRENT POSITION

2020-

Assoc. Professor in Psychology

International Faculty, University of Sheffield, CITY College, GR

РΙ

PROJECT: HOPE – High Frequency Oscillation (HFO) in Pediatric Epilepsy

- 1. Design of the study
- 2. Development of pipelines based on wavelets to extract features of HFOs.
- 3. Development of dimensionality reduction algorithms.
- 4. Investigating the impact of various classification models, including SVMs, deep learning classifiers, CNNs in their accuracy to identify correctly pathological HFOs
- 5. Manage Aston team
- 6. Coordinate a consortium of 13 partners across the Europe.

PROJECT: Automatic recognition of Personality based only on EEG signals during emotional processing.

- 1. Development of explicit feature extraction of EEG signals.
- 2. Development and test the impact of dimensionality reduction algorithms.
- 3. Investigating the impact of various classification models, including SVMs, deep learning classifiers, CNN in their accuracy to predict the human personality.
- 4. Design develop and test the porotype of the automatic personality recognition system in real time.

PREVIOUS POSITION

2017 - 2020

Lecturer in Biomedical Engineering

School of Life and Health Sciences, Aston University, UK

DI

PROJECT: HOPE – High Frequency Oscillation (HFO) in Pediatric Epilepsy (EU funded: H2020-MC-RISE)

- 1. Design of the study
- 2. Development of pipelines based on wavelets to extract features of HFOs.
- 3. Development of dimensionality reduction algorithms.
- 4. Investigating the impact of various classification models, including SVMs, deep learning classifiers, CNNs in their accuracy to identify correctly pathological HFOs
- 5. Manage Aston team
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PROJECT: Automatic recognition of Personality based only on EEG signals during emotional processing.

- 1. Development of explicit feature extraction of EEG signals.
- 2. Development and test the impact of dimensionality reduction algorithms.
- 3. Investigating the impact of various classification models, including SVMs, deep learning classifiers, CNN in their accuracy to predict the human personality.

«Manousos is one of the best researchers in his field. I feel very privileged that I had the opportunity to work with him. He has a very collaborative and creative way of working and is excellent at building relationships at all levels. Manousos has profound scientific knowledge in specific areas. He is definitely a problem solver and a great communicator. Working with him is always a joy!»

Christos Moridis, PhD Founder and Director of Netvalue Neuromarketina

« Manousos recently joined Aston University and I am particularly impressed about his passion and enthusiasm for his research. He also has great entrepreneurial mindset and he is very keen to get involved in activities that can lead to innovation and value creation by engaging with innovative companies. »

Magda Kosmopoulou, MSc, PhD Business Development Managment at Aston University

« I worked with Dr Klados at Aston University and he has been a great team member. Manousos is a great person to work with. He is a professional academic and top researcher in his filed. He has excellent communication skills and seems proactive in doing cutting edge research. What makes Manousos very special colleague is his professionality and dignity. He knows what he is heading too very well and I have no doubt that he will go so far as a leading researcher. I will be glad to work with him in the future in the field of BCI and assistive devices. »

> Khaled Goher, MSc, PhD Lecturer in Biomedical Engineering at Aston University

« I have been working with Manousos for one year. He is a great colleague and he is literally a volcano of great ideas! He is a motivated, forwardthinking and smart lecturer and researcher.»

> Tecla Bonzi, MSc, PhD Teaching Fellow at Aston University

4. Design develop and test the porotype of the automatic personality recognition system in real time.

2017 - 2018

Research Consultant

Chair of Lifespan Developmental Neuroscience, TU Dresden, Germany.

Funded by the project EMOTISK from BMBF (DE).

Advisor: Prof. Shu-Chen Li

PROJECT: Recognition of brain's age using brain signals (DE Funded: EMOTISK project BMBF)

- Development of deep learning algorithms to detect brain's age using PvTorch
- 2. Development of deep learning regression and CNN with Keras
- 3. Visulisation of complex data

2016 - 2017

Research and Teaching Fellow

Chair of Lifespan Developmental Neuroscience, TU Dresden, Germany

Advisor: Prof. Shu-Chen Li

PROJECT: Recognition of brain's age using brain signals (DE Funded: EMOTISK project BMBF)

- 1. Development of machine learning algorithms to detect brain's age
- 2. Validation of the aforementioned algorithms in healthy subjects
- 3. Test the aforementioned algorithms in demented elders.

PROJECT: Model-based and Model-free reinforcement learning (DE Funded: SFB940 by DFG)

- 1. Development of a maze task based on temporal difference algorithm
- Compare the performance of the model with actual data from young and older adults.

2014 - 2016

Postdoctoral Fellow

Max Planck Institute for Human Cognitive and Brain Sciences, Germany

Advisor: **Dr. Daniel Margulies**

PROJECT: Functional Connectivity, and their variance across the subjects

- 1. Phenotypic connectivity maps for personality traits
- 2. Diffusion mapping and Spectral Graph Theory
- 3. Classification of BA44/45 based on functional connectivity
- 4. Development of various algorithm for the processing of fMRI signals **PROJECT:** Automatic parcellation of Broca's areas 44 and 45 based on

connectivity and structural data
Feature selection for the better description of the different connectivity profiles of Broca's 44 and 45

2. Classification using deep learning classifiers and CNN based only on connectivity vectors

(As PI)

« Manousos had been a great Teaching Assistant for particular courses at Lab of Medical Informatics. Very willing to listen to questions and make him self available. Really nice to work with him again»

Anastasios Zafeiropoulos, MSc IT Infrastructure Engineer at Lidl Hellas

« Manousos is a talented scientist with all the qualities needed to be successful at his research field; Hard work, patience and a really sharp mind... »

> Dr. Andreas Triantafyllidis, Research Scientist at CERTH

« Our connection was a year before when he was my supervisor in a subject during my Master's degree including digital signal processing, neuroscience, brain connectivity and graph theory, Manousos is very good at teaching and at introducing students to difficult subjects very easily. He is always willing to explain and help in his areas of expertise which are quite many. Always available even though he is hard working and very sociable. »

Evangelos Stathopoulos,MSc MSc Student at Aristotle University of Thessaloniki

« Manousos has been my supervisor in many of my classes during my Master's degree and during the research for my Master's thesis (that included neuroscience, connectivity, and signal processing). I have learned a great deal about him and his abilities. Manousos has excellent teaching capabilities and can effortlessly break down difficult and complex subjects in order to be easily understandable by students with minimum prior knowledge on the subject. He was always willing to help me with whatever issues I had, and was there whenever I needed mentoring in his areas of expertise. His determination and guidance helped me to excel in my classes and led me to be interested in research and neuroscience »

Georgia Peleka,MSc Software Engineer, Biomedical Informatics - Research Assistant in Information and Technology Institute (ITI) PROJECT: Modeling the cerebellar connectome

- 1. Parcellation of cerebellum.
- 2. Deep learning hierarchical clustering
- 3. Graph theoretical approaches
- 4. New metrics based on information theory in order to compute the functional couplings

2013 - 2015

CEO/PI

Neurofeedback Center of Northern Greece, Greece

(As PI)

PROJECT: The impact of Intracranial light stimulation in the geriatric depression

- 1. Review of geriatric depression literature
- 2. Design, development and implementation of the study
- 3. Processing of EEG signals and extraction of depression related biomarkers mostly based on connectivity profiles using machine learning and data mining techniques
- 4. Assessment of the intervention
- 5. Administrative duties
- 6. Managerial tasks

2012 - 2014

Research Assistant

Lab of Medical Physics, Aristotle University of Thessaloniki

Advisor: **Prof. Panagiotis Bamidis**

PROJECT: Multidimensional Research In Affective Computing For The Recognition Of Emotional, Physiological And Biological Activities In Assistive Environments.

- 1. Study the various models of emotional processing
- 2. Review literature for new machine learning approaches.
- 3. Emotional recognition based on EEG signals and connectivity maps
- 4. Classification strategies for better classification accuracy

PROJECT: Unobtrusive Smart Environments For Independent Living

- 1. Emotion detection using wearable EEG sensor and functional connectivity maps
- 2. Development of data fusion framework.
- 3. Multivariate statistical models.
- 4. Design and develop python scripts for classification of dangerous events.

PROJECT: The neurobiological base of math anxiety (PhD)

- 1. Review the literature of anxiety and math anxiety
- 2. Study the Attentional Control Theory
- 3. Design and implement the experiments
- 4. Design and implement the analysis. This part combines a lot of signal processing, stochastic signal processing, multivariate modeling, pattern detection and machine learning.
- 5. Develop algorithms to identify mathematical anxiety as well as it's severity using EEG signals.
- 6. Propose neurofeedback-based solution to reinforce math anxious students.
- 7. Present the results in international conferences and journals

« Manousos is a creative thinker and a great problem solver. He is a smart, hard-working person with a strong will to accomplish his chosen goals. His valuable support to my thesis, as a supervisor, has been excellent and crucial for my work. »

Vasilis Pezoulas, MSc Student at Technical University of Crete

« While attending my MSc in Medical Informatics, Manousos tutored in several courses and I can say that his lectures was among the most interesting and informative in the whole program.»

Alkinoos Athanasiou, MSc PhD Student at Aristotle University of Thessaloniki

« While attending my Master in Medical Informatics, Manousos was a tutor in several courses. In his lectures and practical sessions he was always very well prepared and very happy to answer all the questions and guide us. After tutoring hours, he was always making himself available and was always willing to help. He also helped me with the final analysis of my master thesis. I must say that his devotion and enthusiasm in in his work always inspired me. The discussions we had, got me interested as well in the field of Neurosciences and some years later I am doing my PhD at a similar field as his. I hope we will have the opportunity to collaborate in the near future.»

> Konstantina Kallogiani, MSc PhD Student at TU Delft

SCIENTIFIC ACTIVITIES

Editorial Board of the following journals:

- Journal of Psychology & Clinical Psychiatry
- International Journal of Neurological Disorders & Interventions
- International Journal of Psychology and Behavioral Science
- Frontiers in Human Neuroscience

2011 - 2011

Research Assistant

Computer Science Department, University of Cyprus, Cyprus

Advisor: **Prof. Constantinos Pattichis PROJECT:** Long Lasting Memories

 Functional Connectivity analysis of EEG signals for the various groups of interventions

2007 - 2010

Research Assistant

Lab of Medical Informatics, Aristotle University of Thessaloniki

Advisor: **Prof. Panagiotis Bamidis PROJECT:** Long Lasting Memories

- 1. Design and development of the study
- 2. Run EEG trials
- 3. Development of the pre-processing pipeline for the EEG data

PROJECT: Extended Mediterranean network of educational resources for higher and continuing medical education

TEACHING

2020 -

Introduction in Research Methods in Clinical Neuropsychology (CPY6125)

Module Leader

MSc in Clinical Neuropsychology, International Faculty of the University of Sheffield, CITY College

2020 -

Fundamentals of Neuropsychology (CPY6124)

Module Leader

MSc in Clinical Neuropsychology, International Faculty of the University of Sheffield, CITY College

Introduction in Research Methods in Counseling Psychology (CPY6123)

Module Leader

MSc in Counselling Psychology, International Faculty of the University of Sheffield, CITY College

Psychological Research Methods (CPY2229)

Module Leader

BSc in Psychology, International Faculty of the University of Sheffield, CITY College

2020 -

2020 –

	Frontiers in Psychology	2020 –	Discovering Science (CPY1103)
	Frontiers in Psychiatry	2020	Module Leader
	International Journal of Bioelectromagnetism		BSc in Psychology, International Faculty of the
Rev	viewer of the following		University of Sheffield, CITY College
	rnals:	2020 –	Research Methods in Counseling
	International Journal of Psychophysiology		Psychology (CPY6108)
	Biomedical Signal Processing and Control		Module Leader MSc in Counselling Psychology, International Faculty of the University of Sheffield, CITY College
	PloS One	2047 2020	
	Journal of Psychology & Clinical Psychiatry	2017 – 2020	Software Engineering (BE1SE1) Module Leader
	Clinical EEG & Neuroscience		BEng/MEng in Biomedical Engineering, Aston University, UK
	IEEE Transactions on Biomedical Engineering	2017 – 2020	Medical Imaging (BE3IM1)
	PeerJ		Module Leader
	Frontiers in Human Neuroscience		BEng/MEng in Biomedical Engineering, Aston University, UK
	Neuroimage	2016 – 2017	EEG Signal Processing
	British Journal of Mathematics and Computer Science		Module Leader
	Nature - Scientific Reports		MSc in Cognitive and Affective Neuroscience, TU Dresden Germany
	Entropy	2013 – 2014	Biological Networks
	Neuroscience Letters	2010 2014	Core Instructor
	Nature – Translational Psychiatry		MSc in Complex Systems and Networks, Aristotle
	Acta Astronautica		University of Thessaloniki, Greece
	air of the following nferences:	2012 – 2012	Biological Networks
	IEEE BR41N.IO BCI Hackathon		Teaching Assistant
^	(BCIH2019)		MSc in Complex Systems and Networks, Aristotle
	Society of Applied Neuroscience Meeting 2016 (SAN2016)	2010 – 2012	University of Thessaloniki, Greece Brain Functional Connectivity
	ganizing committee of the	2010 – 2012	•
foll	owing conferences:		Teaching Assistant
	IEEE International Conference on Biohealth and Biomedical		MSc in Medical Informatics, Aristotle University of Thessaloniki, Greece
₩.	Engineering 2019 (BIBE2019)	2008 – 2013	EEG Signal Processing
	Society of Applied Neuroscience Meeting 2019 (SAN2019)		Teaching Assistant
	2nd International Conference on Brain Function Assessment and		MSc in Medical Informatics, Aristotle University of Thessaloniki, Greece
	Learning (BFAL2018)	2008 – 2013	Medical Informatics
	Society of Applied Neuroscience Meeting 2014 (SAN2014)		Head Lab Tutor

Society of Applied Neuroscience Meeting 2011 (SAN2011)		BSc in Medicine and Dentistry, Aristotle University of Thessaloniki, Greece
The 12th Mediterranean		
Conference On Medical And Biological Engineering And Computing (MEDICON2010)		FUNDING
	2019 – 2023	HOPE - (PI/Coordinator)
6th International Conference of Aerospace Medicine (IAA 2009)		1.23M€
5th Annual Scientific Conference		Funded by the EU under the H2020-MC-RISE scheme (No: 823958).
of the Medical School of Aristotle University of Thessaloniki (5th	!	Aston University, UK
SCMSAUTH)	2018 – 2021	OPTIMEC - (co-I).
Project Reviewer for:		234.000£
The national science center of Poland - (2018)The Ministry of Education,		Funded by the Innovate UK under the Knowledge Transfer Partnership.
Universities and Research of Italy		Aston University, UK
– PRIN call (2018)	2014 – 2016	Personal Grant - (PI)
PROFESSIONAL	l	64.000€
ASSOCIATIONS Board Member of the Society of		Funded by the Max Planck Society for my postdoctoral research
Applied Neuroscience (SAN) International Brain Research Organization (IBRO)		Max Planck Institute of Human Cognitive and Brain Science, Germany
Institute of Electrical and	2013 – 2015	NEUROFOS - (PI)
Electronics Engineers (IEEE) International Federation for		87.000€
Medical and Biological Engineering (IFMBE)		Funded by the General Secretariat of Research
European Alliance for Medical		and Technology of Greek Government.
and Biological Engineering Science (EAMBES)		Neurofeedback Center of Northern Greece, Greece
Max Planck SocietyHellenic Society of Neuroscience	2012 – 2012	Scholarship
(HSN) MENSA		4.000€
Hellenic Society of Biomedical Engineering (ELEVIT)		Scholarship for research excellence by the Aristotle University of Thessaloniki.
Hellenic Mathematical Society (HMS)		Aristotle University of Thessaloniki, Greece
Fellow of Institute of	2007 – 2009	EPEAK fellow
Mathematics and Applications (IMA)		4.000€
Fellow of Higher Education Academy (HEA)		Scholarship for my studies in the MSc in Medical Informatics by the Greek Ministry Of Education And Religion.
		Aristotle University of Thessaloniki, Greece
SKILLSET		AWARDS
MODALITIES	2013	Award
EEG	l	Certification of recognition for my publication entitled "Towards A Graph Theoretical Approach

entitled "Towards A Graph Theoretical Approach To Study Gender Lateralization Effect In

MEG

fMRI
MRI
fNIRS

2010

2009

2009

METHODOLOGIES

CONNECTIVITY

DYNAMIC CONN.

MACHINE LEARNING

DATA MINING

ERP/ERO/ERDS

TIME-FREQUENCY

ARTIFACT REJECTION

CDR

MICROSTATES

COMPUTATIONAL

C/C++/C# .NET PHP-SQL HTML5/JAVASCRIPT **PYTHON FORTRAN MATLAB** R **BRAINSTORM EEGLAB KERAS PYTORCH BRAINGL PRESENTATION** E-PRIME **WEKA NEUROSKY API** EMOTIV API

MATHEMATICAL

MULT. STAT.

LATENT VAR. MOD.

GRAPH THEORY

SPEC. GRAPH TH.

MODELING

WAVELETS

PERSONAL

COMMUNICATION
ORGANIZATION
TEAM MANAGEM.
PROBLEM SOLVING

Mathematical Thinking" in IEEE 12th International Conference On Bioinformatics And Bioengineering

Distinction

Distinction of my paper entitled "REG-ICA: A Hybrid Methodology Combining Blind Source Separation And Regression Techniques For The Rejection Of Ocular Artifacts" as the most cited articles. Elsevier – Biomedical Signal Processing And Control.

Award

Praise for outstanding research activity within the graduate program of the medical school of the Aristotle University Of Thessaloniki for my publication entitled "REG-ICA: A Hybrid Methodology Combining Blind Source Separation And Regression Techniques For The Rejection Of Ocular Artifacts". Medical School Of Aristotle University Of Thessaloniki

Award

Certification of merit for my publication entitled "REG-ICA: A New Hybrid Method For Eog Artifact Rejection" in IEEE 9th International Conference On Information Technology And Application In Biomedicine.

PUBLICATIONS

GUEST EDITOR IN SPECIAL ISSUES

- M.A. Klados (Lead Guest Editor), P. Arico, A. Vivas, "Network Neuroscience: Brain Networks in the Field of Affective, Cognitive and Personality Neuroscience", Brain Sciences.
- M.A. Klados (Lead Guest Editor), J.H. Gruzelier and P.D. Bamidis, "Applied Neuroscience: Methodology, Modeling, Theory, Applications and Reviews", Frontiers in Human Neuroscience (Accepted).
- M.A. Klados, P.D. Bamidis and J.H. Gruzelier, Biennial Meeting of the Society of Applied Neuroscience (SAN2016), Publisher: Frontiers Media SA, ISBN: 978-2-88919-993-8
- P.D.Bamidis, M. A. Klados, A.B. Vivas, C. Pappas, and J.H. Gruzelier. "In Abstracts of the 3rd Biennial Meeting of the Society of Applied Neuroscience 5–8 May 2011, Thessaloniki, Greece.", Neuroscience Letters, vol. 500, p. 1. 2011.

PEER-REVIEWED INTERNATIONAL JOURNALS

(*Equal Contribution **Senior Author)

1. Stergiadis, C., Kostaridou, V. D., & Klados, M. A. (2022). Which BSS method separates better the EEG Signals? A comparison of five different algorithms. Biomedical Signal Processing and Control, 72, 103292.

TEAM PLAYER
PROJ. MANAGEM.
CREATIVITY
SOCIAL



- Mortaheb, S., Klados, M. A., Van Calster, L., Boulakis, P. A., Georgoula, K., Majerus, S., & Demertzi, A. (2021). Mind blanking is associated with a rigid spatio-temporal profile in typical wakefulness. bioRxiv.
- Anagnostopoulou, A., Styliadis, C., Kartsidis, P., Romanopoulou, E., Zilidou, V., Karali, C., Karagianni, M., Klados, M., Paraskevopoulos, E., Bamidis, P. D. (2021). Computerized physical and cognitive training improves the functional architecture of the brain in adults with Down Syndrome: a network science EEG study. Network Neuroscience (5) 1. https://doi.org/10.1162/netn a 00177
- Klados, M. A., Konstantinidi, P., Dacosta-Aguayo, R., Kostaridou, V.-D., Vinciarelli, A., & Zervakis, M. (2020). Automatic Recognition of Personality Profiles Using EEG Functional Connectivity During Emotional Processing. In Brain Sciences (Vol. 10, Issue 5). https://doi.org/10.3390/brainsci10050278
- Sciaraffa, N., Klados, M. A., Borghini, G., Flumeri, G. Di, Babiloni, F., & Aricò, P. (2020). Double-Step Machine Learning Based Procedure for HFOs Detection and Classification. Brain Sciences 2020, Vol. 10, Page 220, 10(4), 220. https://doi.org/10.3390/BRAINSCI10040220
- Ros, T., Enriquez-Geppert, S., Zotev, V., Young, K. D., Wood, G., Whitfield-Gabrieli, S., Wan, F., Vuilleumier, P., Vialatte, F., Van De Ville, D., Todder, D., Surmeli, T., Sulzer, J. S., Strehl, U., Sterman, M. B., Steiner, N. J., Sorger, B., Soekadar, S. R., Sitaram, R., ... Thibault, R. T. (2020). Consensus on the reporting and experimental design of clinical and cognitive-behavioural neurofeedback studies (CRED-nf checklist). Brain. https://doi.org/10.1093/brain/awaa009
- 7. **Baeuchl, C., Chen, H.-Y., Su, Y.-S., Hämmerer, D., **Klados, M. A.***, & Li, S.-C*. (2019). **Interactive effects of dopamine transporter genotype and aging on resting-state functional networks**. PLOS ONE, 14(5), e0215849. https://doi.org/10.1371/journal.pone.0215849
- 8. Klados, M. A., Paraskevopoulos, E., Pandria, N., & Bamidis, P. D. (2019). The impact of math anxiety on working memory: A cortical activations and cortical functional connectivity EEG study. IEEE Access, 1–1. https://doi.org/10.1109/ACCESS.2019.2892808
- Ros, T., Enriquez-Geppert, S., Zotev, V., Young, K., Wood, G., Whitfield-Gabrieli, S., ... Thibault, R. T. (2019, January 23). Consensus on the reporting and experimental design of clinical and cognitive-behavioural neurofeedback studies (CRED-nf checklist). https://doi.org/10.31234/osf.io/nyx84
- Pezoulas, V. C., Michalopoulos, K., Klados, M., Micheloyannis, S., Bourbakis, N., & Zervakis, M. (2018). Functional connectivity analysis of cerebellum using spatially constrained spectral clustering. IEEE Journal of Biomedical and Health Informatics, 1–1. http://doi.org/10.1109/JBHI.2018.2868918
- 11. llg, L., Klados, M., Alexander, N., Kirschbaum, C., & Li, S.-C. (2018). Long-term impacts of prenatal synthetic glucocorticoids exposure on functional brain correlates of cognitive monitoring in adolescence. Scientific Reports, 8(1). http://doi.org/10.1038/s41598-018-26067-3
- Athanasiou, A., Klados, M. A., Pandria, N., Foroglou, N., Kavazidi, K. R., Polyzoidis, K., & Bamidis, P. D. (2017). A Systematic Review of Investigations into Functional Brain Connectivity Following Spinal Cord Injury. Frontiers in Human Neuroscience. Retrieved from https://www.frontiersin.org/article/10.3389/fnhum.2017.00517
- Klados, M. A., Pandria, N., Micheloyannis, S., Margulies, D., & Bamidis, P. D. (2017). Math anxiety: Brain cortical network changes in anticipation of doing mathematics. International Journal of Psychophysiology. http://doi.org/10.1016/j.ijpsycho.2017.05.003
- 14. **Pezoulas, V., Zervakis, M., Micheloyannis, S., & Klados, M. A. (2017). Resting-state functional connectivity and network analysis of

- cerebellum with respect to crystallized IQ and gender. Frontiers in Human Neuroscience. Retrieved from http://journal.frontiersin.org/article/10.3389/fnhum.2017.00189
- Jakobsen, E., Liem, F., Klados, M. A., Bayrak, Ş., Petrides, M., & Margulies, D. S. (2016). Automated individual-level parcellation of Broca's region based on functional connectivity. NeuroImage. http://doi.org/10.1016/j.neuroimage.2016.09.069
- Klados, M. A., & Bamidis, P. D. (2016). A semi-simulated EEG/EOG dataset for the comparison of EOG artifact rejection techniques. Data in Brief, 8, 1004–1006. http://doi.org/10.1016/j.dib.2016.06.032
- Athanasiou, A., Klados, M. A., Styliadis, C., Foroglou, N., Polyzoidis, K., & Bamidis, P. D. (2016). Investigating the role of alpha and beta rhythms in functional motor networks. Neuroscience. http://doi.org/10.1016/j.neuroscience.2016.05.044
- Klados, M. A., Styliadis, C., Frantzidis, C. A., Paraskevopoulos, E., & Bamidis, P. D. (2016). Beta-Band Functional Connectivity is Reorganized in Mild Cognitive Impairment after Combined Computerized Physical and Cognitive Training. Frontiers in Neuroscience, 10. http://doi.org/10.3389/fnins.2016.00055
- Klados, M. A., Simos, P., Micheloyannis, S., Margulies, D., & Bamidis, P. D. (2015). ERP measures of math anxiety: how math anxiety affects working memory and mental calculation tasks? Frontiers in Behavioral Neuroscience, 9. http://doi.org/10.3389/fnbeh.2015.00282
- Frantzidis, C. A., Vivas, A. B., Tsolaki, A., Klados, M. A., Tsolaki, M., & Bamidis, P. D. (2014). Functional disorganization of small-world brain networks in mild Alzheimer's Disease and amnestic Mild Cognitive Impairment: an EEG study using Relative Wavelet Entropy (RWE). Frontiers in Aging Neuroscience, 6. http://doi.org/10.3389/fnagi.2014.00224
- 21. Klados, M. A. & Bamidis, P.D.(2014). Beyond the Clinical Use of Neurofeedback. Journal of Psychology & Clinical Psychiatry, 1(3). http://doi.org/10.15406/jpcpy.2014.01.00014
- 22. Bamidis, P. D., Vivas, A. B., Styliadis, C., Frantzidis, C., Klados, M.A., Schlee, W., ... Papageorgiou, S. G. (2014). A review of physical and cognitive interventions in aging. Neuroscience & Biobehavioral Reviews, 44, 206–220. http://doi.org/10.1016/j.neubiorev.2014.03.019
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- Klados, G. A., Zervakis, M., Dacosta-Aguayo, R., Fratini, A., & Klados, M. A. (2019). Towards a Novel Way to Predict Deficits After a Brain Lesion:
 A Stroke Example. 2019 IEEE 19th International Conference on Bioinformatics and Bioengineering (BIBE), 737–741. https://doi.org/10.1109/BIBE.2019.00138
- Fenech, M., Seri, S., & Klados, M. (2019). High-Frequency Oscillations in Epilepsy: A Short Review. 2019 IEEE 19th International Conference on Bioinformatics and Bioengineering (BIBE), 882–885. https://doi.org/10.1109/BIBE.2019.00164
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- Dacosta-Aguayo, R., Stephan-Otto, C., Auer, T., Clemente, I., Davalos, A., Bargallo, N., ... Klados, M. A. (2017). Predicting Cognitive Recovery of Stroke Patients from the Structural MRI Connectome Using a Naïve Bayesian Tree Classifier. In 2017 IEEE 30th International Symposium on Computer-Based Medical Systems (CBMS) (pp. 413–418). IEEE. http://doi.org/10.1109/CBMS.2017.106
- 7. Klados, M.A., Lauckner, M., Jackobsen, E., & Daniel, M. (2016). Characterizing the Primary Spectrum of Personality and Brain Connectivity. In 22nd Annual Meeting of the Organization for Human Brain Mapping.
- Pezoulas, V., Zervakis, M., Micheloyannis, S., & Klados, M. A. (2016). Investigating the correlation between crystallized IQ and network metrics in cerebellum using resting-state fMRI. Frontiers in Human Neuroscience, 10. http://doi.org/10.3389/conf.fnhum.2016.220.00013
- 9. Klados, M. A. (2016). Human Connectome as a big-data problem: New approaches for analysis and visualization. Frontiers in Human Neuroscience, 10. http://doi.org/10.3389/conf.fnhum.2016.220.00012
- Athanasiou, A., Klados, M. A., Astaras, A., Foroglou, N., Magras, I., & Bamidis, P. D. (2016). State of the Art and Future Prospects of Nanotechnologies in the Field of Brain-Computer Interfaces. In XIV Mediterranean Conference on Medical and Biological Engineering and Computing (pp. 456–460). Springer. http://doi.org/10.1007/978-3-319-32703-7 89
- Athanasiou, A., Klados, M. A., Foroglou, N., Klados, K. R., Polyzoidis, K., & Barnidis, P. D. (2016). Reorganization of brain networks after spinal cord injury: a qualitative synthesis of the literature. Frontiers in Human Neuroscience, 10. http://doi.org/10.3389/conf.fnhum.2016.220.00036
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- 13. Jakobsen, E., **Klados**, **M.A.**, Zelmer, J., Goulas, A., & Margulies, D. S. (2015). **Automated individual-level parcellation of Broca's region based on resting-state functional connectivity.** In 21st Annual Meeting of the Organization for Human Brain Mapping (OHBM).
- 14. Klados, M. A., Styliadis, C., & Bamidis, P. D. (2014). A Short Review on Emotional Recognition Based on Biosignal Pattern Analysis. In XIII Mediterranean Conference on Medical and Biological Engineering and Computing (pp. 787–790). http://doi.org/10.1007/978-3-319-00846-2 2 195
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- Engineering and Computing 2010 (pp. 827–830). Springer. http://doi.org/10.1007/978-3-642-13039-7 209
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- Klados, M. A., Papadelis, C. L., & Bamidis, P. D. (2009). REG-ICA: A new hybrid method for EOG Artifact Rejection. In 2009 9th International Conference on Information Technology and Applications in Biomedicine (pp. 1–4). IEEE. http://doi.org/10.1109/ITAB.2009.5394295

(Co-) Supervision of Students

PhD Students

2019 –	Matthew Fenech. Automatic Detection of High Frequency Oscillations.
	Aston University, UK
2018 –	Fabio Barolo. Modeling of EMG artifacts in the scalp using Finite Element Modelling.
	Aston University UK

MSc/Meng Students

2021 – 2022	2 MSc Students, MSc in Clinical Neuropsychology, University of York Europe Campus, CITY College, Thessaloniki, Greece.
2020 – 2021	5 MSc Students, MSc in Counselling Psychology/ MSc in Clinical Neuropsychology, The International Faculty of the University of Sheffield, CITY College, Thessaloniki, Greece.
2018 – 2019	Vasiliki-Despoina Kostaridou. Understanding the role of personality in emodiversity and their neurophysiological correlates: an EEG study.
	MSc in Cognitive Neuroscience, Aston University,

UK

2015 – 2017	Vasilios Pezoulas. The connectivity of cerebellum and it's relation to human intelligence.
	MSc in Signal Processing, Technical University of Crete, Greece
2015 – 2016	Agni Pourika. The inter-idependence index as a metric in brain functional connectivity.
	MSc in Complex Systems and Networks, Aristotle University of Thessaloniki, Greece
2015 – 2016	Maria Grigoriadou. Brain networks during mathematical cognition.
	MSc in Complex Systems and Networks, Aristotle University of Thessaloniki, Greece
BSc/BEng Stude	ents
2021 – 2022	4 BSc Students, BSc in Psychology, The International Faculty of the University of Sheffield, CITY College, Thessaloniki, Greece.
2020 – 2021	6 BSc Students, BSc in Psychology, The International Faculty of the University of Sheffield,
2017 – 2018	Natasha Rupansinghe. Wireless and wearable GSR device for monitoring the ANS.
	BEng in Biomedical Engineering, Aston University, UK
2017 – 2018	Cory Thomas. Wireless and wearable EEG system for the control of a wheelchair
	BEng in Biomedical Engineering, Aston University, UK Aston University, UK
2017 – 2018	Panagiota Konstantinidi . Recognising human personality from EEG signals,
	BEng in Electronic and Electrical Engineering, Technical University of Crete, Greece
	Erasmus Students
2019	Georgios Klados. Prediction of imposed deficits by neurosurgery.
	BEng in Electronic and Electrical Engineering, Technical University of Crete, Greece
2018	Panagiota Konstantinidi . Recognising human personality from EEG signals.
	BEng in Electronic and Electrical Engineering, Technical University of Crete, Greece
	Invited Talks
2021	Invited online interview from Neurogenesis . Applied Neuroscience Club in Greece.
2021	Invited Lecture in Personality Neuroscience . University of Liege, Liege, Belgium

2019	Invited Keynote speaker at «Out of the Lab employment of Neurophysiological measures: clinical applications and beyond» Workshop. University of Sapienza, Rome, Italy
2018	Invited Lecture in Biomedical Engineering . University of Cagliari, Cagliari, Italy
2018	Oral Presentation in IEEE EMBS International Conference on Biomedical & Health Informatics (BHI). Chicago, USA
2017	Two Oral Presentations in 30 th IEEE International Symposium on Computer-Based Medical Systems (CBMS). Thessaloniki, Greece
2016	Three Oral Presentations in Society of Applied Neuroscience Meeting 2016 . Corfu, Greece
2013	Oral Presentation in XIII Mediterranean Conference on Medical and Biological Engineering and Computing. Seville, Spain
2013	Oral Presentation in 26 th IEEE International Symposium on Computer-Based Medical Systems (CBMS). Porto, Portugal.
2013	Oral Presentation in 12 th IEEE International Conference on Bioinformatics & Bioengineering (BIBE). Larnaca, Cyprus.
2010	Oral Presentation in XII Mediterranean Conference on Medical and Biological Engineering and Computing. Chalkidiki, Greece.
2009	Oral Presentation in 9 th IEEE International Conference on Information Technology and Applications in Biomedicine. Larnaca, Cyprus.
2008	Oral Presentation in 4th European Conference of the International Federation for Medical and Biological Engineering . Antwerp, Belgium.

Invited Guest Editor in Special Issues

Deep Learning in Biomedical Informatics and Healthcare in Sensors
 Real-World Applications of Neurophysiological Monitoring for Passive Brain-Computer Interfaces in Frontiers in Human neuroscience