

**FORM NUM: 500.1.03** 

## Academic Personnel Short Profile / Short CV

University:	University of Nicosia
Surname:	Nicolaou
Name:	Nicoletta
Rank/Position:	Associate Professor
Faculty:	Medical School
Department:	Basic and Clinical Sciences
Scientific Domain: *	Biomedical Signal Processing / Machine Learning / Neuroscience

<sup>\*</sup> Field of Specialization

Academic qualifications (list by highest qualification)						
Qualification	Year	Awarding Institution	Department	Thesis title (Optional Entry)		
PhD in Cybernetics	2006	University of Reading	Cybernetics	Automatic artefact removal from Electroencephalograms		
BSc (Hons.) in Cybernetics & Control Engineering	2001	University of Reading	Cybernetics	Automatic Speech Recognition using Stochastic Diffusion Search		

Employn	Employment history in Academic Institutions/Research Centers – List by the three (3) most recent							
Period of empl	oyment	Employer	Location	Position				
From	То	Elliployei	Location	Position				
02/2018	Present	University of Nicosia Medical School	Nicosia, Cyprus	Associate Professor (2018-20: Assistant Professor)				
09/2016	12/2017	University of Reading (Dept. of Biomedical Engineering)	Reading, UK	Postdoctoral Fellow				
08/2014	08/2016	Imperial College London (Dept. of Electrical and Electronic Engineering)	London, UK	Marie-Skłodowska Curie Fellow				

Academic Staff Short Profile

## Key <u>refereed</u> journal papers, monographs, books, conference publications etc. List the five (5) more recent and other five (5) selected –(max total 10) Vol. Ref. Number Title Other authors Journal and **Pages** Year Publisher / Conference I. Stavraki, N. Nicolaou, M. 2022 (Chapter 5) Electrophysiology (Book Chapter) in 1 163and consciousness: a review Vizcaychipi Applications of 195 Machine Learning in Digital Healthcare, M. Hernandez Silveira. S-S. Ang (eds.), Healthcare Technology series 36, The Institution of **Engineering and** Technology 2 Extendable Hybrid Approach S. Adama, S-J. Wu, N. Simulation Notes 2022 32 (1) 37-45 to Detect Conscious States in Nicolaou, M. Bogdan, Europe a CLIS Patient Using Machine Learning Brain and brain-heart Granger H Abdalbari, M Durrani, S 3 2022 Frontiers in 16 92711 causality during wakefulness Pancholi, N Patel, S Neuroscience Nasuto, N Nicolaou and sleep 4 2022 Concept maps as a novel S Loizou, N Nicolaou, BA MedEdPublish 12(21) 21 Pincus, A Papageorgiou, P assessment tool in medical education McCrorie 5 2020 Consciousness Detection in a S.-J. Wu. N. Nicolaou. M. Entropy 22 (12) 1411 Complete Locked-in Bogdan Syndrome Patient through Multiscale Approach Analysis 6 Neurophysiological and S. Stefani, I. Kousiappa, N. Front. Integr. 2020 14 45 Genetic Findings in Patients Nicolaou, E.S. Neurosci. With Juvenile Myoclonic Papathanasiou, A. Oulas,

Epilepsy

P. Fanis, V. Neocleous,

			L.A. Phylactou, G.M. Spyrou, S.P. Papacostas			
7	2020	Neural and physiological data from participants listening to affective music	I. Daly, <b>N. Nicolaou</b> , D. Williams, F. Hwang, A. Kirke, E. Miranda, S.J. Nasuto	Scientific Data	7	177
8	2020	A systematic review of haemodynamic stability of closed-loop anaesthesia systems	E. Kong, <b>N. Nicolaou</b> , M. Vizcaychipi	Minerva Anestesiologica	86 (1)	76-87
9	2019	Non-invasive real-time autonomic function characterization during surgery via continuous Poincaré quantification of heart rate variability	M. Ardissino, <b>N. Nicolaou</b> , M. Vizcaychipi	Journal of Clinical Monitoring and Computing	33	627-35
10	2016	A nonlinear causality estimator based on Non-Parametric Multiplicative Regression	N. Nicolaou, T. Constantinou	frontiers in Neuroinformatics	10	19

	Exhibitions (where applicable). List the five (5) more recent and other five (5) selected. (max total 10)						
Ref. Number	Date	Topic	International / Local	Location*	Role in Exhibition		
1	2019	Researcher's Night	Local	Cyprus	Activity leader		
2	2018	Researcher's Night	Local	Cyprus	Activity leader		
3	2005- onwards	Conference presentations and participation	International and local	Various	Presenter (oral presentations, posters) and participant		

<sup>\*</sup>Specify venue, geographic location etc

## Research Projects. List the five (5) more recent and other five (5) selected

	(max total 10)						
Ref. Number	Date	Title	Funded by	Project Role*			
1	2022-2024	Effect of probiotics on cognitive functioning of patients with early AD	Alzheimer's Association	Principal Investigator			
2	2022-2023	The Effects of Electrical Power Stations on Air Quality, the Marine Environment, and Human Health in Cyprus (AETHER)	The University of Nicosia Medical School Research Seed Fund	Research team member			
3	2021-2022	Simulation in medical education: development of a stethoscope for realistic auscultation during clinical competence examinations (SimuSCOPE)	The University of Nicosia Medical School Research Seed Fund	Principal Investigator			
4	2021-2023	Leadership and management in the undergraduate medical curriculum (LEADER)	The University of Nicosia Medical School Research Seed Fund	Research team member			
5	2019-2021	IoT based Continuous Environmental Monitoring for Health Analytics (Snow-IoT)	Cyprus Research Promotion Foundation (ENTERPRISES)	Research team member			
6	2019-2020	Real-time music modification based on biosignals (RUMBA)	The University of Nicosia Medical School Research Seed Fund	Principal Investigator			
7	2019-2020	Concept maps as a novel assessment tool in medical education (CANVAS)	The University of Nicosia Medical School Research Seed Fund	Research team member			
8	2014-2016	Monitoring awareness during anaesthesia: a multi-modal approach (AnaeWARE)	Marie-Skłodowska Curie Actions Individual Fellowship (European Research Agency)	Marie-Skłodowska Curie Research Fellow			
9	2009-2012	Monitoring of awareness during anaesthesia	Cyprus Research Promotion	DIDAKTOR Research Fellow			

			Foundation (DIDAKTOR)	
10	2019-2023	The neural architecture of consciousness (COST Action CA18106)	European Cooperation in Science and Technology (COST)	Management Committee member

<sup>\*</sup>Project Role: i.e. Scientific/Project Coordinator, Research Team Member, Researcher, Assistant Researcher, other

Aca	Academic Consulting Services and/or Participation in Councils / Boards/ Editorial Committees.  List the five (5) more recent (Optional Entry)					
Ref. Number	Period	Organization	Title of Position or Service	Key Activities		
1	2015-present	Various	Grant reviewer	Reviewing grant applications (Organizations: MRC UK, NIHR UK, EPSRC UK, Canadian Institute for Health Research Canada, Alzheimer's Association USA)		
2	2016-2020	Imperial College London	Consultant ("EEG signal processing in balance disorders"; PI: Prof Bronstein)	Consulting		
3	2015-2019	IET Electronics Letters	Associate Editor	Article pre-screening, reviewer assignments, article decisions		
4	2017-present	Various journals	Guest Academic / Associate Editor	Article reviewing, reviewer assignment, article decision		
5	2017-present	Various conferences	Review Committee Member	Article reviewing, reviewer assignment, article decision (e.g. IEEE BioCAS, IEEE ISCAS, IJCNN)		

Awards / International Recognition (where applicable). List the five (5) more recent and other five (5) selected. (max total 10) (Optional Entry)

Ref. Number	Date	Title	Awarded by:
1	2018	Student Essay Prize for paper "Development of a non-invasive, real-time novel autonomic monitoring tool using continuous Poincaré quantification of heart rate dynamics" (with M. Ardissino, M.P. Vizcaychipi)	The Royal Society of Medicine UK (Anaesthesia Section)
2	2016-2018	Honorary Research Fellow	Imperial College London, UK
3	2018-2019	Visiting Research Fellow	University of Reading, UK
4	2008	Best Paper for "Autoregressive features for a thought-to-speech converter" (with J. Georgiou, M. Polycarpou)	BIODEVICES Conference (Madeira)
5	2005	Winner of 1 <sup>st</sup> annual data analysis competition on "Evaluation and development of intelligent artefact rejection in multidimensional signal processing" (with S.J. Nasuto)	IEEE Workshop MLSP (Mystic, USA)
6	2005	Best Presentation	IEEE EMBS UK & RI Conf. PGBiomed (Reading)
7	2002-onwards	Various travel grants for attendance at international conferences and courses	Examples: IEEE (Student/Young Investigator Fellowship for Beijing Satellite Symposium of 27 <sup>th</sup> IEEE EMBC 2005); European Neural Network Society (for ICANN/ICONIP 2003); Marine Biological Laboratory (for 'Neuroinformatics' summer school)
8	2002-2005	Scholarship for PhD Fees	Overseas Research Council, UK

	Other Achievements. List the five (5) more recent and other five (5) selected. (max total 10) (Optional Entry)					
Ref. Number	Date	Title	Key Activities:			
1	2019-2021	Member of the Parallel House of Representatives Committee on Public Health	Consulting, reporting, making recommendations			
2	2018	Invited talk on "Technology in medicine: advancements in anaesthetic monitoring"	Talk (4 <sup>th</sup> Industrial Revolution Conference, House of Representatives, Nicosia, Cyprus)			
3	2018	Invited talk on "Towards Closed-loop anaesthetic delivery: progress and challenges"	Talk (C3NL Brain Meeting Seminar Series, Hammersmith Hospital, Imperial College London, UK)			

4	2017	Conference Special Session on "Brain- Computer-Interfaces and Brain State Detection for Medical Applications"	Programme Committee member, Neurotechnix 2016, 7-8 Nov., Porto, Portugal
5	2015	Conference Special Session on "Emerging non-invasive brain monitoring"	Session Chair & Programme Committee member, IEEE BioCAS 2015, 22-24 Oct., Atlanta, USA
6	2015	Invited presentation on "Awareness monitoring during anaesthesia: the EEG and analysis tools"	Presentation (Charing Cross Hospital, UK)
7	2007-present	Regular reviewer for scientific journals	Article reviewing (example journals: IEEE Trans. on Biomedical Engineering, IEEE Trans. on Biomedical Circuits and Systems, IEEE Trans. on Signal Processing, PLoS ONE, Clinical EEG and Neuroscience, IET Electronics Letters, Pattern Recognition, Computer Methods and Programs in Biomedicine, Biomedical Signal Processing & Control., J. of Neurocomputing, Entropy)
8	2005	Secretary of Engineering in Medicine and Biology Student Society UK & Ireland	Secretarial roles