

Academic Personnel Short Profile / Short CV

University:	Frederick University
Surname:	Tjirkallis
Name:	Andreas
Rank/Position:	Assistant Professor
School:	School of Engineering
Department:	Mechanical Engineering
Scientific Domain:	Structural Health Monitoring, Mechatronics, Vibrations, Signal Processing and Analysis

	Academic qualifications						
Qualification	Year	Awarding Institution	Department	Thesis title (Optional Entry)			
PhD Mechanical Engineering	2013	University of Cyprus	Mechanical and Manufacturing Engineering	Continuous Structural Health Monitoring under varying environmental and operational conditions using Wavelet Transform Modulus Maxima decay lines similarity			
Professional Development University Certificate	2004	De Montfort University, Leicester	Computing, Engineering and Media	Forensic Road Accident Investigation and Analysis			
Bachelor of Engineering (BEng)	2003	Imperial College, London	Mechanical Engineering	Cycle Variability in lean burn Spark Ignition Engines			

	Employment history in Academic Institutions/Research Centers					
Period of empl	loyment	Employer	Location	Position		
From	То	Employer	Location	Position		
2019	today	Frederick University	Cyprus	Assistant Professor		
2015	today	ACE R&D	Cyprus	Researcher		
2016	2019	University of Cyprus	Cyprus	Visiting Lecturer		
2014	2015	Frederick University	Cyprus	Visiting Lecturer		
2009	2013	Frederick University	Cyprus	Special Teaching Staff		
2006	2009	University of Cyprus	Cyprus	Scientific Collaborator / Assistant Instructor		

	Key <u>refereed</u> journal papers, monographs, books, conference publications etc.							
Ref. Number	Year	Title	Other authors	Journal and Publisher / Conference	Vol.	Pages		
1	2017	Structural damage detection of a cantilever beam under varying temperature using a collection of time series	Andreas Kyprianou	2 nd International Conference on Structural Integrity, ICSI 2017				
2	2016	Damage Detection under varying environmental and operational conditions using Wavelet Transform Modulus Maxima decay line similarity	Andreas Kyprianou	Mechanical Systems and Signal Processing	66-67	282- 297		
3	2016	Damage Detection in a Cantilever Beam under Different Excitation and Temperature Conditions	Andreas Kyprianou	International Conference on Noise and Vibration Engineering, 2016				
4	2015	Wavelet Transform Modulus Maxima Decay Lines: Damage Detection in Varying Operating Conditions	Andreas Kyprianou	IGI Global Disseminator of Knowledge. Book Chapter 3: Emerging Design Solutions in Structural Health Monitoring Systems		48-68		

5	2015	Damage Detection Under Varying Operating Conditions using a Sequence of Time Responses of a Cantilever Beam	Andreas Kyprianou,	International Conference on Structural Engineering Dynamics		
6	2013	Structural Health Monitoring under varying environmental conditions using wavelets	Andreas Kyprianou, George Vessiaris	Key Engineering Materials	569- 570	1218- 1225
7	2009	The effect of Biofuel on Exhaust Gas Emissions under non-laboratory conditions	Alexander G. Charalambides	Distres Conference, 2009		

	Research Projects						
Ref. Number	Date	Title	Funded by	Project Role			
1	2002 – 2003	Cycle Variability in lean burn Spark Ignition Engines	Imperial College, London, Honda R&D Group	Junior researcher, Signal Processing and LabView Software development			
2	2007 - 2013	Continuous Structural Health Monitoring under varying environmental and operational conditions using Wavelet Transform Modulus Maxima decay lines similarity	Continuous Structural Health Monitoring under arrying environmental and operational conditions using Wavelet Transform Modulus Maxima decay				
3	2015 – 2019	Sixth sense – fingers low frequency vibrotactile stimuli soundless communication	IREROBOT LTD	Principal Researcher			
4	2016 - today	Abnormal Electrocardiogram (ECG) Signal Identification using Wavelet Transform Modulus Maxima Decay Lines Similarity	University of Cyprus, ACE R&D	Principal Researcher			
5	2017 - today	Unrestrained Occupant behaviour in vehicle partial rollover.	GT Engineers / ACE R&D	Project Coordinator / Principal Researcher			
6	2017 - today	Seventh Sense	Ministry of Energy, Commence and Industry (Ενίσχυση Επιχειρηματικής Καινοτομίας)	ACE R&D Project Coordinator / Senior Researcher			

	Academic Consulting Services and/or Participation in Councils / Boards/ Editorial Committees					
Ref. Number	Period	Organization	Title of Position or Service	Key Activities		
1	2008 – today	Cyprus Scientific and Technical Chamber	Registered Mechanical and Automotive Engineering Expert	Registered as an expert in the mechanical and automotive engineering field, providing testimonials to despute cases		
2	2015 – today	Human Resource Development Authority of Cyprus	External Examiner	External Examiner in the field of Mechanical and Automotive Engineering		
3	2016 – today	Mechanical Systems and Signal Processing Journal	Reviewer	Journal reviewer		
4	2019 – today	International Journal of Mechanical Engineering and Applications	Reviewer	Journal reviewer		

	Awards / International Recognition				
Ref. Number	Date	Title	Awarded by:		
1	2001	Manufacturing Technology and Workshop skills	Imperial College, London		
2	2003	City and Guilds Associateship Award in Mechanical Engineering	City and Guilds, UK		
3	2015	Train the Trainer in Installation, Repair & Maintenance of LPG/CNG systems in Automobiles, CPC	EG EuropeGAS z.o.o, Poland		

	Other Achievements					
Ref. Number	Date	Title	Key Activities:			
1	2017-2018	Road Accident Investigation, Reconstruction and Simulation, Pantelis Pantelides, Athens.	In charge of a Group of Road Accident Investigators and Engineers, in the Examination, Investigation, Analysis and Simulation of a complex fatal road accident.			