

Academic Personnel Short Profile / Short CV

University:	University of Nicosia
Surname:	Aharonson
Name:	Vered
Rank/Position:	Professor
Faculty:	Medical School
Department:	Basic and Clinical Sciences
Scientific Domain: *	Medical Physiscs

** Field of Specialization*

Academic qualifications (list by highest qualification)				
Qualification	Year	Awarding Institution	Department	Thesis title (Optional Entry)
PHD	1998	Tel Aviv university, Israel	Electrical Engineering	
MSC	1992	Technion, Israel Institute of Technology	Physics	
BSc	1990	Technion, Israel Institute of Technology	Physics	

Employment history in Academic Institutions/Research Centers – List by the three (3) most recent				
Period of employment		Employer	Location	Position
From	To			
2021	2023	UCLAN Cyprus	Pyla, Cyprus	Professor
2015	2020	University of the Witwatersrand,	Johannesburg, South Africa	Professor
2004	2015	Afeka, Tel Aviv Academic College of Engineering	Tel Aviv Israel	Associate professor
2000	2004	Tel Aviv University	Tel Aviv Israel	Senior lecturer

1998	2000	Harvard University	Boston, MA	Research Fellow
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Key refereed journal papers, monographs, books, conference publications etc. List the five (5) more recent and other five (5) selected –(max total 10)

Ref. Number	Year	Title	Other authors	Journal and Publisher / Conference	Vol.	Pages
1	2023	Aharonson, V. Postema, M. and Schlesinger, I (2023) "Sobel Edge detection for quantifying the effectiveness of focused ultrasound thalamotomy for tremor release" current directions in Biomedical Engineering 9(1)				
2	2021	Mohamed, AK and <u>Aharonson, V.</u> Four-class BCI discrimination of right and left wrist and finger movements, IFAC-PapersOnLine, Volume 54, Issue 21, 2021, Pages 91-96.				
3	2021	Gritzman, A. Rubin, D. Postema, M. and <u>Aharonson, V.</u> (2021) "Shape-based Adaptive Thresholding for Lip Segmentation using Support Vector Regression" Signal Image and Video Processing, 1-6.				
4	2020	Pinkas, G. Karny, Y. Malachi, A. Barkai, G. Bachar, G. and <u>Aharonson, V.</u> (2020) "SARS-CoV-2 Detection from Voice," IEEE Open Journal of Engineering in Medicine and Biology, (1) 268-274.				

5	2020	Aharonson, V. Coopoo, V. Govender, K. L. and Postema, M. (2020) "Four Configurations for Low-Cost Eye-Tracking" – IEEE Africa Research Journal 111 (3) 120-124				
6	2020	Aharonson, V., Babshet, K. and Korczyn, A., (2020). "Towards a computerized estimation of visual complexity in images: data to assess the association of computed visual complexity features to human responses in visual tasks". Data in brief, 32, p.106108.				
7	2020	Aharonson, V. Seedat, N. Israeli-Korn, S. Hassin-Baer, S. Postema, M. Yahalom, G. (2020) "Automated stage discrimination of Parkinson's disease", Journal of Bio-Integration. Vol 1 (2) p. 1-9.				
8	2019	Khan, T. Nowaczyk, S, Anderson, D., Aharonson, V. (2019) "Assessing Parkinson's disease severity using speech analysis in non-native speakers" Computer Speech and Language 61 p.101047.				
9	2018	Aharonson, V. McDonald, A. Schlesinger, I. Korczyn, A. and Dubowsky, S. (2018) "A Practical Measurement of Parkinson's Patients Gait Using Simple Walker-Based Motion Sensing and Data Analysis" Journal of Medical Device 12(1), 12-20.				
10	2017	Aharonson, V., Aharonson, E., Raichlin-Levi, K., Sotzianu, A., Amir, O., & Ovadia-Blechman, Z. (2017). A real-time phoneme counting algorithm and				

		application for speech rate monitoring. Journal of Fluency Disorders. 51 60-68				
	2017	Ovadia-Blechman, Z., Gavish, B., Levy-Aharoni, D., Shashar, D., & Aharonson, V. (2017). The coupling between peripheral microcirculation and slow breathing. Medical Engineering & Physics, 39, 49-56.				

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	Parkinson's disease continuous severity monitoring from Speech	Ministry of science "Science accelerators program, with Meir medical center, Israel	PI
2	2022 -	BTheChange – Technology for creative education on Climate Change	ErasmusPlus EC	PI
3	2020-2021	Afeka Center for Language Processing (ACLP) – SARS-COV-2 detection from Speech	Directorate of Defense Research and Development (DDRD) of the Israeli Ministry of Defense	Senior researcher and head of Lab
3	2015-2020	1. Automated detection and monitoring of Parkinson's disease from hand movement, gait and speech. 2. EMG/ EEG signal processing for brain-computer interfaces. Supervisor of numerous MSc. and PhD. postgraduates.	South Africa National Research Foundatiopn - NRF	Labs founder and PI

4	2009-2015	Afeka Center for Language Processing (ACLPL) – multiple projects on Intelligent interfaces for Human-computer interaction	Directorate of Defense Research and Development (DDRD) of the Israeli Ministry of Defense	Co-Founder and PI
5	2008-2010	Robotic walker for monitoring Parkinson's disease gait	MIT MISTI fund for International collaboration	Co-researcher with Prof. Steven Dubowsky, head of Robotics Lab MIT
6	2004-2005	Early Cognitive Impairment detection from biometric signals	Israel Incubators funding program, Ministry of Commerce	
7	1998-2000	Modelling of biologically-inspired neural network	Harvard research grant	Individual Researcher
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**Project Role: i.e. Scientific/Project Coordinator, Research Team Member, Researcher, Assistant Researcher, other*

**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	2010	Israel ministry of transport	"Sky order" project for the Israeli government ministry of Transport. Evaluation and optimization of air traffic in Ben Gurion airport	PI
2	2009	Israel ministry of transport	Project Inbal – an Israeli government projects company. The effect of solar energy farm on military flight activities in the desert.	PI
3	2004-2008	start-up founder	NexSig, Neurological Examination Technologies, Ltd.	Founder and CTO Developed a biometric signal processing tool for detection of cognitive decline.

				Company Funded by the chief scientist of the ministry of commerce and private investors. The products have been developed and the company is now in the sales phase to health organizations
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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	2022	Ministry of science "Science accelerators program, with Meir medical center, Israel.	
2	2020-2022	Directorate of Defense Research and Development (DDRD) of the Israeli Ministry of Defense full funding for ACLP activities	
3	2016-2019	South Africa NRF, rated researcher yearly personal fund (ZAR 90,000 in 3 years)	
4	2012-2015	MIT International Science and Technology Initiatives (MISTI), with Prof. Steve Dubowsky, MIT mechanical Engineering. "Mitigating the Effects of Parkinson's Disease using a Smart Walker" (€50000)	
5	2011	Israeli ministry of Commerce grant (knowledge transfer)with NICE INTELLIGENCE SOLUTIONS: "Phonetic Search in New Languages via Automated Transformation Tools" (€100000)	
6	2011	Israeli ministry of Defense grant (renewed). Topic "natural dialog system for soldier-robot interaction by voice" (€200000).	

7	2010	Israeli ministry of Defense grant. Topic "natural dialog system for soldier-robot interaction by voice". (€200000)	
8	2009	Israeli ministry of Commerce grant (knowledge transfer) with "Speech Modules" Ltd. Topic: "Efficient search algorithm for word sequence matching to a sequence of phonemes". (€100000)	
9	2004-2008	Research grant as a partner in the Network of Excellence HUMAINE (Human-Machine Interaction Network on Emotion) –from the the EU's Sixth Framework Programme, in the IST (Information Society Technologies) Thematic Priority IST-2002-2.3.1.6 Multimodal Interfaces. (€100000)	
10	1995	Personal research Award of the Adams Super Center for Brain Research, Tel Aviv, Israel	