BIOGRAPHICAL SKETCH

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NAME: Bermperidis, Theodoros

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Graduate/ Research Assistant

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
University of Patras, Patras	BS	12/2018	Electrical and Computer Engineering
University of Patras, Patras	MS	12/2018	Electrical and Computer Engineering
University of Patras, Patras	MS	09/2019	Biomedical Engineering
Rutgers the State University, NJ	MS	05/2022	Psychology/ Cognitive Psychology
Rutgers the State University, NJ	PHD	2024	Psychology/ Cognitive Psychology

A. Personal Statement

Since I remember myself, a little kid, I was passionate about answering questions about science. Biology was my first love. Then I discovered Physics and I realized that we can describe natural phenomena using the language of mathematics. After high school, I joined a 5-year integrated Bachelors and MSc degree in Electrical and Computer Engineering at the Polytechnic School of the University of Patras, Greece and upon graduation I enrolled and completed at the same institution a MSc degree in Biomedical Engineering. Equipped with the ability to mathematically model and analyze human data and basic knowledges of Biomechanics and the Physiology of the Nervous System I joined Prof. Elizabeth Torres Lab Fall of 2019, as a graduate assistant. I got my MSc in Psychology Spring of 2022 and I am currently pursuing Doctorate in Cognitive Science.

I use and develop tools from Machine Learning, Statistics and Information Theory to discover models and laws that govern human neurophysiology and the motor system, from molecules to behavior. My aspiration is that these tools will contribute to the development of technologies that assist in the diagnosis and treatment of disorders of the nervous system.

1. Bermperidis T, Schafer S, Gage FH, Sejnowski T, Torres EB. Dynamic Interrogation of Stochastic Transcriptome Trajectories Using Disease Associated Genes Reveals Distinct Origins of Neurological and Psychiatric Disorders. Front Neurosci. 2022;16:884707. PubMed Central PMCID: PMC9201694.

2. Bermperidis T, Rai R, Ryu J, Zanotto D, Agrawal SK, Lalwani AK, Torres EB. Optimal time lags from causal prediction model help stratify and forecast nervous system pathology. Sci Rep. 2021 Oct 22;11(1):20904. PubMed Central PMCID: PMC8536772.

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

2019 -   Graduate/ Research Assistant , Rutgers University , School of Arts and Sciences, Departments of Psychology , Sensory Motor Integration Lab, Advisor Prof. Elizabeth Torres , Piscataway , NJ

Honors

2022	Scholarship grant from Gerontelis Foundation, Gerontelis Foundation
2013	1st position in the 23nd National Physics Competition , Association of Greek Physicists
2013	Scholarship prize from Eurobank for achieving the highest graduation grade at high school as well as the highest university admission grade, Eurobank Group (Financial company)
2011	4th position in the 21st National Physics Competition, Association of Greek Physicists

C. Contribution to Science