

# Katerina Tzimourta, PhD

RESEARCH ASSOCIATE | ADJUNCT LECTURER | IT ENGINEER

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## **SHORT CV**

Dr. Katerina Tzimourta is a Postdoctoral Researcher in the Dept. of Electrical & Computer Engineering, Univ. of Western Macedonia and an Adjunct Lecturer in the Dept. of Informatics & Telecommunications, Univ. of Ioannina, Greece. She is an IT Engineer by education and she focuses on the analysis of electroencephalographic (EEG) signals acquired from clinical EEG recordings and data acquired from wearable devices for brain and cognitive disorders' analysis. Over the past 3 years she has developed a diverse set of skills, encompassing teaching abilities, research expertise, and administrative competencies.

# EXPERIENCE

#### **Adjunct Lecturer**

Department of Electrical & Computer Engineering, Univ. of Western Macedonia 04.2023 – Today Q Kozani, Greece

Department of Informatics & Telecommunications, University of Ioannina 3.2020 – Today 

Arta, Greece

Department of Communication & Digital Media, Univ. of Western Macedonia 10.2021 – 01.2022 ♀ Kastoria, Greece

## **Postdoctoral Researcher**

Department of Electrical & Computer Engineering, Univ. of Western Macedonia 09.2020 – Today Q Kozani, Greece

### Administrative Assistant

Department of Electrical & Computer Engineering, Univ. of Western Macedonia 3.2023 – Today Volume Kozani, Greece

# FUNDING PROJECT PARTICIPATION

**06.2023 – Today** Project "smartHEALTH - European Digital Innovation Hub for Smart Health: Precision Medicine and Innovative E-health Services".

#### 03.2023 – Today

Project 5158681. "Doctoral program of the Department of Electrical and Computer Engineering" under the action "Internalization actions of University of Western Macedonia".

# **EDUCATION**

2015 **MEng** 

in Informatics & Telecommunications, Dept. of Informatics & Telecommunications Engineering, University of Western Macedonia

#### 2020 PhD

in Medical Informatics, School of Medicine, University of Ioannina

# LANGUAGES

- GREEK (NATIVE)
- ENGLISH (C2)

# **SKILLS**

- O RESEARCH
- PROJECT PORTFOLIO
   MANAGEMENT
- O SCIENTIFIC WRITING
- O ORGANIZATION
- O EEG ANALYSIS
- EXCELLENT WRITTEN/
   VERBAL COMMUNICATION
- O ATTENTION TO DETAIL
- O PROBLEM-SOLVING

## **DIGITAL SKILLS**

#### MATLAB

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#### 09.2020 – Today

Project 5069902/T2EΔK-02438. "Intelli-WheelChair: Intelligent electric wheelchair exclusively driven by mental and voice commands", Research Committee of the University of Western Macedonia.

#### 05.2018 - 12.2018

Business Plan for the Ioannina Smart City Project, Special Account for Research Grants, Technological Educational Institute of Epirus.

## PUBLICATIONS

Total Publications: 31

- Peer-reviewed International Journals: 18
- peer-reviewed International Conferences: 13

Representative Publications (Full list of publications available at http://ktzimourta.com/publications/)

	SPSS
	WEKA
	CSS/HTML
	WORDPRESS
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	РНОТОЅНОР
	MICROSOFT OFFICE

[1] K. D. **Tzimourta**, *et al.*, "Machine Learning Algorithms and Statistical Approaches for Alzheimer's Disease Analysis Based on Resting-State EEG Recordings: A Systematic Review", *International Journal of Neural Systems*, pp.2130002-21300033, 2021.

[2] K. D. **Tzimourta**, *et al.*, "Analysis of EEG signals complexity regarding Alzheimer's Disease", *Computers and Electrical Engineering*, vol. 76, pp. 198-212, 2019.

[3] K. D. **Tzimourta**, *et al.*, "EEG Window Length Evaluation for the Detection of Alzheimer's Disease over Different Brain Regions", *Brain sciences*, vol. 9(4), pp. 81, 2019.

[4] K. D. **Tzimourta**, *et al.*, "A robust methodology for classification of epileptic seizures in EEG signals", *Health and Technology*, vol. 9, pp. 135-142, 2018.

[5] K. D. **Tzimourta** *et al.*, "EEG-based automatic sleep stage classification", *Biomedical Journal of Scientific & Technical Research*, vol. 1(6), 2018.

[6] A. Miltiadous, K. D. **Tzimourta**, et al., "Machine Learning Algorithms for Epilepsy Detection based on published EEG databases: A Systematic Review", *IEEE Access*, vol. 11, pp. 564 – 594, 2023.

[7] A. Miltiadous, K. D. **Tzimourta**, *et al.*, "Alzheimer's disease and Frontotemporal dementia: A robust classification method of EEG signals and a comparison of validation methods", *Diagnostics*, vol. 11(8), pp.1437, 2021.

[8] A. Miltiadous, K. D. **Tzimourta**, *et al.*, "A Dataset of Scalp EEG Recordings of Alzheimer's Disease, Frontotemporal Dementia and Healthy Subjects from Routine EEG", *Data*, vol. 8(6), pp.95, 2023.

[9] P. Christodoulides, A. Miltiadous, K. D. **Tzimourta** *et al.*, "Classification of EEG Signals from Young Adults with Dyslexia combining a Brain Computer Interface and an Interactive Linguistic Software Tool". *Biomedical Signal Processing* & *Control*, vol. 76, pp. 103646, 2022.

[10] K. Glavas, G. Prapas, K. D. **Tzimourta** et al., "Evaluation of the User Adaptation in a BCI Game Environment", *Applied Sciences*, vol. 12(24), pp.12722, 2022.

## CITATIONS

- 287 references (source: Scopus), h-index = 10
- 531 references (source: Google Scholar), h-index = 13, i10-index = 13