WERONIKA WOJTAK, PHD

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SKILLS

Python (numpy, pandas, PyTorch), MATLAB, Microsoft Azure

Deep Learning, Neural Networks, Mathematical Modeling, Dynamical Systems, Differential Equations, Statistics

EDUCATION

PhD in Applied Mathematics
University of Minho, Portugal
2016 – 2021
Grade: Very good

M.S. in Computer Science
University of Zielona Góra, Poland
2012 – 2013
Grade: 5/5

B.S. in Biomedical Engineering
University of Zielona Góra, Poland
2008 – 2012
Grade: 5/5

CERTIFICATES

Professional Certificate in MLOps with Azure

NMA Deep Learning

VOLUNTEERING

Project mentor
NMA Deep Learning July 2023

Guided students in developing a deep learning project aimed at classifying brain tumors using MRI images.

OVERVIEW

As an experienced researcher with a background in applied mathematics and a keen interest in artificial intelligence, my adaptability, problem-solving skills, and commitment to learning make me a strong candidate for the Data Scientist role. After many years dedicated to academic research, I am now excited to embark on new challenges in the industry. My history of applying mathematical models to real-world problems showcases my ability to quickly grasp new concepts, ensuring effective contributions to complex ML projects.

PROFESSIONAL EXPERIENCE

Senior Development Technician

CCG/ZGDV Institute — July 2023 – present

- Developing a learning system to empower intelligent vehicles to understand users' daily driving patterns, enabling predictive assistance for an enhanced user experience.

Postdoctoral researcher

University of Minho, Centre Algoritmi — Dec 2020 – Jun 2023

- Continued studying developed models, using them to generate cognitive functions, enhancing vehicles' intelligent behavior for personalized user experiences.
- Used Physics-Informed Neural Networks to estimate solutions of neural field equations.
- Published one journal article and two conference papers.

PhD researcher

University of Minho, Centre of Mathematics — Sep 2016 – Nov 2020

- Developed a novel dynamic neural field model overcoming limitations of traditional models.
- Mathematical and numerical analysis of model solutions.
- Applied the model to cognitive neuroscience, simulating multi-item memory tasks and time interval learning.
- Applied the model to robotics, designing cognitive architectures for human-robot collaboration and autonomous decision-making.
- Published four journal articles and three conference papers.

Early Stage Researcher (Marie Curie Fellowship)

University of Minho, Centre Algoritmi — Oct 2013 – Aug 2016

- Developed neuro-inspired control architectures for human-robot interaction (HRI).
- Published two conference papers.