Panagiotis Anagnostou

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Koufokosta 2, 35131
Lamia, GRC

CURRENT POSITION

University of Thessaly — Lamia, GRC
Post Doctoral Researcher in Computer Science and Biomedical Informatics — February 2024–Current

- Advisor: Tasoulis Sotiris

EDUCATION

University of Thessaly — Lamia, GRC
Post Doctoral Researcher in Computer Science and Biomedical Informatics — February 2024–Current

- Advisor: Tasoulis Sotiris
- Title: "Machine Learning Algorithms in Big Data"

University of Thessaly — Lamia, GRC
Doctor of Philosophy (Ph.D.) in Computer Science and Biomedical Informatics — 2019–2023

- Advisor: Tasoulis Sotiris
- Thesis: "Design and Implementation of Machine Learning Algorithms in Big Biomedical Data"

University of Patras — Patras, GRC
Bachelor with Integrated master in Computer Engineering and Informatics, Degree: 6.70 — 2009 –2019

- Thesis: "Knowledge mining and visualization of molecular biology networks"

EXPERIENCE

University of Thessaly — Lamia, GRC
Role: Researcher — March 2022–Current

- "Bridging big omic, genetic and medical data for Precision Medicine implementation in Greece (project code TAEDR-0539180)"
- Funded by the European Union – NextGenerationEU through Greece 2.0—National Recovery and Resilience Plan, under the call "Flagship actions in interdisciplinary scientific fields with a special focus on the productive fabric" (ID 16618).

Institute for Bio-economy and Agri-technology iBO/CERTH — Lamia, GRC
Role: Researcher — December 2023–Current

- "Personalized Rehabilitation Via Novel AI Patient Stratification Strategies (PREPARE)"
- Funded by the European Union. UK participants in Horizon Europe Project PREPARE are supported by UKRI grant number 10086219 (Trilateral Research).

Institute for Bio-economy and Agri-technology iBO/CERTH — Lamia, GRC
Role: Researcher — August 2021–October 2023

- "uPrevent"

Signal Ocean SMPC Lamia, GRC

Role: Researcher February 2023–October 2023

– "Design and implementation of machine learning algorithms for the prediction and analysis of the course of transport vessels"

University of Thessaly Lamia, GRC

Role: Researcher March 2022–September 2023

– "ParICT_CENG: Improving ICT research infrastructures in Central Greece for processing large volumes of data from sensor streams, multimedia and complex mathematical simulation models"

Signal Ocean SMPC Lamia, GRC

Role: Researcher March 2021–December 2021

– "Design and implementation of machine learning algorithms for the prediction and analysis of the course of transport vessels"

Institute for Bio-economy and Agri-technology iBO/CERTH Lamia, GRC

Role: Researcher March 2016–April 2021

– "Advanced personalised, multi-scale computer models preventing OsteoArthritis,"

PUBLICATIONS

[1] S. K. Tasoulis, **P. Anagnostou**, A. G. Vrahatis, S. V. Georgakopoulos, and V. P. Plagianakos, "Boosting neural network performance for high dimensional data through random projections," *Available at SSRN 4991467,*

[2] P. Barmpas, **P. Anagnostou**, S. K. Tasoulis, S. V. Georgakopoulos, and V. P. Plagianakos, "HCER: Hierarchical clustering-ensemble regressor," in *Engineering Applications of Neural Networks*, L. Iliadis, I. Maglogiannis, A. Papaleonidas, E. Pimenidis, and C. Jayne, Eds., Cham: Springer Nature Switzerland, 2024, pp. 369–378, ISBN: 978-3-031-62495-7.

[3] **P. Anagnostou**, P. Barmpas, S. K. Tasoulis, S. V. Georgakopoulos, and V. P. Plagianakos, "Neural networks voting for projection based ensemble classifiers," in *2023 IEEE International Conference on Big Data (BigData)*, IEEE, 2023, pp. 4567–4574.

[4] **P. Anagnostou**, N. G. Pavlidis, and S. K. Tasoulis, "Ensemble clustering for boundary detection in high-dimensional data," in *Proceedings of the 9th Annual Conference on Machine Learning, Optimization and Data Science (LOD)*, Lake District, UK: Springer, 2023.

[5] **P. Anagnostou**, S. Tasoulis, V. P. Plagianakos, and D. Tasoulis, "HiPart: Hierarchical divisive clustering toolbox," *Journal of Open Source Software*, vol. 8, no. 84, p. 5024, 2023.

[6] P. C. Theocharopoulos, **P. Anagnostou**, A. Tsoukala, S. V. Georgakopoulos, S. K. Tasoulis, and V. P. Plagianakos, "Detection of fake generated scientific abstracts," in *2023 IEEE Ninth International Conference on Big Data Computing Service and Applications (BigDataService)*, 2023, pp. 33–39.

[7] P. Barmpas, S. Tasoulis, A. G. Vrahatis, S. V. Georgakopoulos, **P. Anagnostou**, M. Prina, J. L. Ayuso-Mateos, J. Bickenbach, I. Bayes, M. Bobak, *et al.*, "A divisive hierarchical clustering methodology for enhancing the ensemble prediction power in large scale population studies: The athlos project," *Health Information Science and Systems*, vol. 10, no. 1, p. 6, 2022.

[8] **P. Anagnostou**, S. Tasoulis, A. G. Vrahatis, S. Georgakopoulos, M. Prina, J. L. Ayuso-Mateos, J. Bickenbach, I. Bayes-Marin, F. F. Caballero, L. Egea-Cortés, *et al.*, "Enhancing the human health status prediction: The athlos project," *Applied Artificial Intelligence*, vol. 35, no. 11, pp. 834–856, 2021.

[9] **P. Anagnostou**, P. Barbas, A. G. Vrahatis, and S. K. Tasoulis, "Approximate knn classification for biomedical data," in *2020 IEEE International Conference on Big Data (Big Data)*, IEEE, 2020, pp. 3602–3607.

INVITED TALKS

- N. G. Pavlidis, **P. Anagnostou**, and S. Tasoulis, "Dimensionality reduction and clustering", in Proceedings 35th Panhellenic & 1st International Statistics Conference, Athens, Greece, 2023. Co-presenters: Pavlidis, Nicos G., and Tasoulis, Sotiris.

REFEREE SERVICE

- Reviewer on, the journal of Pattern Recognition Letters (PRLetters) the journal of Future generation computer systems (FGCS), the Journal of Open-Source Software (JOSS) and the journal of Neural computing & applications (NCAA).
- **Program Committee Member**, IEEE Symposium Series on Computational Intelligence (IEEE SSCI), 2024
- **Program Committee Member**, IEEE Congress on Evolutionary Computation (IEEE CEC), 2024
- **Program Committee Member**, IEEE International Conference on Big Data (IEEE BigData), 2021 and 2023

TEACHING

- **Instructor** at Department of Computer Science and Biomedical Informatics, University of Thessaly   Fall 2024
  Microprocessors (DIB_U_206)
– Part of the program "Acquisition of Academic Teaching Experience for New PhD Holders" co-funded by the European Union and National Resources.
- **Instructor** at Department of Computer Science and Biomedical Informatics, University of Thessaly   Fall 2024
  Internet Application Technologies (DIB_U_182)
– Part of the program "Acquisition of Academic Teaching Experience for New PhD Holders" co-funded by the European Union and National Resources.
- **Instructor** at Department of Computer Science and Biomedical Informatics, University of Thessaly   Spring 2024
  Embedded Computer Systems in Biomedical Engineering (DIB_U_211)
– Part of the program "Acquisition of Academic Teaching Experience for New PhD Holders" co-funded by the European Union and National Resources.
- **Instructor** at Department of Computer Science and Biomedical Informatics, University of Thessaly   Spring 2024
  Ubiquitous Computing Applications Programming (DIB_U_235)
– Part of the program "Acquisition of Academic Teaching Experience for New PhD Holders" co-funded by the European Union and National Resources.

Technical Skills

- **Programming Languages:**
  - **Object Oriented:** C++, Java
  - **Procedural:** C, Pascal
  - **Scripting:** R, Python, Bash, PHP
  - **Other:** Latex, Matlab, XML, HTML5, CSS, MySQL, Prolog
- **Operating Systems:**
  - GNU/Linux. Proficient in using CLI and GUI.
  - Microsoft Windows
  - Android. Application level development.
- **Version Control System:** Git
- **Build automation tool:** Apache Maven

Languages

- **Greek:** Native Language
- **English:** State Certificate of Language Proficiency (KPG), Level B2