# **Giannis Nikolentzos**

CONTACT University of Peloponnese

INFORMATION Department of Informatics and Telecommunications E-mail: lastname@uop.gr

Akadimaikou G.K. Vlachou www: users.uop.gr/~nikolentzos/

22100, Tripoli, Greece

RESEARCH **INTERESTS**  graph representation learning, machine learning on graphs, graph mining, social network analysis, graph algorithms, learning with structured data, text mining, natural language processing

**ACADEMIC** APPOINTMENTS Assistant Professor, University of Peloponnese

Department of Informatics and Telecommunications

Postdoctoral Researcher, École Polytechnique

Computer Science Laboratory

Participation in the AML-HELAS project (ANR-19-CHIA-0020) which focused on the development of advanced AI algorithms for different data formats including text, graphs and time series; Designed graph learning algorithms and graph generative models for medical data.

**Research Engineer**, Athens University of Economics and Business Jan. 2020 to Dec. 2021 Department of Informatics

Developed graph learning algorithms for image data and time series data.

Postdoctoral Researcher, École Polytechnique

Computer Science Laboratory

Participation in the ESIGMA project (ANR-17-CE23-0010) which used graph theory as a guideline to navigate the various structural aspects of graph data; Worked on the development of graph kernels which rely on basic principles from graph theory and theoretical algorithm design.

Research Engineer, École Polytechnique

Computer Science Laboratory

Participation in the OpenPaaS::NG project which developed next generation cloud-enabled collaborative applications; Worked on algorithms for automatic summarization of meeting transcriptions.

Research Assistant, Athena RC

Jun. 2014 to Mar. 2016

Apr. 2016 to Dec. 2017

Jan. 2024 to present

Jan. 2022 to Dec. 2023

Jan. 2018 to Dec. 2019

Institute for the Management of Information Systems

Participation in the MEDA project which focused on the efficient management of Big Data; Worked on event summarization from tweet streams.

**EDUCATION** 

Athens Univeristy of Economics and Business, Athens, Greece

Ph.D. in Computer Science, Jun. 2014 to Dec. 2017

- Thesis Title: Machine Learning on Graphs: Algorithms and Applications
- Advisor: Professor Michalis Vazirgiannis

University of Southampton, Southampton, UK

M.Sc. in Artificial Intelligence, Oct. 2012 to Oct. 2013

Univeristy of Patras, Patras, Greece

Diploma in Electrical and Computer Engineering, Oct. 2005 to Jul. 2011

## **BME Conference Fellowship**

2023

Travel grant to attend the ICML conference awarded by the Enginneering for Health (E4H) interdisciplinary Center of Institut Polytechnique de Paris.

## Distinguished paper award

2018

Received for a paper presented at the International Joint Conference on Artificial Intelligence (IJCAI).

## Scholarship towards Doctoral studies in Computer Science

2015

Received scholarship from the Academy of Athens to complete PhD studies in Computer Science.

### Distinction awarded by the University of Southampton

2013

Graduated 3rd out of approximately 50 students of my class.

## Awards for excellence in high school

2000-2005

Awarded by the Greek Ministry of Education.

# JOURNAL PUBLICATIONS

- [1] Kosma C., Nikolentzos G., Panagopoulos G., Steyaert J.M. and Vazirgiannis M., "Neural Ordinary Differential Equations for Modeling Epidemic Spreading", *Transactions on Machine Learning Research*, (2023).
- [2] <u>Nikolentzos G.</u>, Vazirgiannis M., Xypolopoulos C., Lingman M., and Brandt, E.G., "Synthetic electronic health records generated with variational graph autoencoders", *npj Digital Medicine*, Vol 6, No 1, (2023).
- [3] Skianis K., Nikolentzos G., Gallix B., Thiebaut R., and Exarchakis G., "Predicting COVID-19 positivity and hospitalization with multi-scale graph neural networks", *Scientific Reports*, Vol 13, No 1, (2023).
- [4] Nikolentzos G., Dasoulas G., and Vazirgiannis M., "Permute Me Softly: Learning Soft Permutations for Graph Representations", *IEEE Transactions on Pattern Analysis and Machine Intelligence*, Vol 45, No 4, pp. 5087-5098, (2023).
- [5] Nikolentzos G., Siglidis G., and Vazirgiannis M., "Graph Kernels: A Survey", *Journal of Artificial Intelligence Research*, Vol 72, pp. 943-1027 (2021).
- [6] Nikolentzos G., Dasoulas G. and Vazirgiannis M., "k-hop Graph Neural Networks", *Neural Networks*, Vol 130, pp. 195-205, (2020).
- [7] Siglidis G., Nikolentzos G., Limnios S., Giatsidis C., Skianis K. and Vazirgiannis M., "GraKeL: A Graph Kernel Library in Python", *Journal of Machine Learning Research*, Vol 21, No 54, pp. 1-5, (2020).
- [8] Nikolentzos G. and Vazirgiannis M., "Learning Structural Node Representations using Graph Kernels", *IEEE Transactions on Knowledge and Data Engineering*, Vol 33, Issue 5, pp. 2045-2056, (2021).
- [9] Giatsidis C., Nikolentzos G., Zhang C., Tang J. and Vazirgiannis M., "Rooted Citation Graphs Density Metrics for Research Papers Influence Evaluation", *Journal of Infor*metrics, Vol 13, Issue 2, pp. 757-768, (2019).

## CONFERENCE PUBLICATIONS

- [10] Ennadir S., Alkhatib A., <u>Nikolentzos G.</u>, Vazirgiannis, M. and Boström H., "Unbound-Attack: Generating Unbounded Adversarial Attacks to Graph Neural Networks", *In Proceedings of the 12th International Conference on Complex Networks and Their Applications* (Complex Networks '23), pp. 100-111, Menton Riviera, France, November 28-30, 2023.
- [11] Chatzianastasis M., Nikolentzos G. and Vazirgiannis M., "Supervised Attention Using Homophily in Graph Neural Networks", In Proceedings of the 32nd International Conference on Artificial Neural Networks (ICANN '23), pp. 576-586, Heraklion, Greece, September 26-29, 2023.
- [12] Michel G., Nikolentzos G., Lutzeyer J., and Vazirgiannis M., "Path Neural Networks: Expressive and Accurate Graph Neural Networks", *In Proceedings of the 40th International Conference on Machine Learning* (ICML '23), pp. 24737-24755, Honolulu, USA, July 23-29, 2023.
- [13] Nikolentzos G., and Vazirgiannis M., "Geometric Random Walk Graph Neural Networks via Implicit Layers", *In Proceedings of the 26th International Conference on Artificial Intelligence and Statistics* (AISTATS '23'), pp. 2035-2053, Valencia, Spain, April 25-27, 2023.
- [14] Nikolentzos G., and Vazirgiannis M., "Graph Alignment Kernels using Weisfeiler and Leman Hierarchies", *In Proceedings of the 26th International Conference on Artificial Intelligence and Statistics* (AISTATS '23'), pp. 2019-2034, Valencia, Spain, April 25-27, 2023.
- [15] Nikolentzos G., Chatzianastasis M., and Vazirgiannis M., "Weisfeiler and Leman go Hyperbolic: Learning Distance Preserving Node Representations", *In Proceedings of the 26th International Conference on Artificial Intelligence and Statistics* (AISTATS '23'), pp. 1037-1054, Valencia, Spain, April 25-27, 2023.
- [16] Kosma C., Nikolentzos G., and Vazirgiannis M., "Time Series Forecasting Models Copy the Past: How to Mitigate", *In Proceedings of the 31st International Conference on Artificial Neural Networks* (ICANN '22), pp. 366-378, Bristol, UK, September 6–9, 2022.
- [17] Chatzianastasis M., Nikolentzos G., and Vazirgiannis M., "Mass Enhanced Node Embeddings for Drug Repurposing", *In Proceedings of the 12th Hellenic Conference on Artificial Intelligence* (SETN '22), pp. 1-5, Corfu, Greece, September 7-9, 2022.
- [18] Xu N., Nikolentzos G., Vazirgiannis M., and Boström H., "Image Keypoint Matching Using Graph Neural Networks", *In Proceedings of the 10th International Conference on Complex Networks and Their Applications* (Complex Networks '22), pp. 441-451, Madrid, Spain, November 30 December 2, 2021.
- [19] Nikolentzos G., Panagopoulos G. and Vazirgiannis M., "An Empirical Study of the Expressiveness of Graph Kernels and Graph Neural Networks", *In Proceedings of the 30th International Conference on Artificial Neural Networks* (ICANN '21), pp. 139-150, online, September 14-17, 2021. [Acceptance rate: 47.5%]
- [20] Dasoulas G., Nikolentzos G., Scaman K., Virmaux A., and Vazirgiannis M., "Ego-based Entropy Measures for Structural Representations", *In Proceedings of the 46th IEEE International Conference on Acoustics, Speech and Signal Processing* (ICASSP '21), pp. 3210-3214, online, June 6-11, 2021.
- [21] Panagopoulos G., <u>Nikolentzos G.</u>, and Vazirgiannis M., "Transfer Graph Neural Networks for Pandemic Forecasting", *In Proceedings of the 35th AAAI Conference on Artificial Intelligence* (AAAI '21), pp. 4838-4845, online, February 2-9, 2021.

- [22] Nikolentzos G., and Vazirgiannis M., "Random Walk Graph Neural Networks", *In Proceedings of the 34th Conference on Neural Information Processing Systems* (NeurIPS '20), pp. 16211-16222, online, December 6-12, 2020.
- [23] Nikolentzos G., Thomas M., Ramírez Rivera A., and Vazirgiannis M., "Image Classification Using Graph-Based Representations and Graph Neural Networks", *In Proceedings of the 9th International Conference on Complex Networks and Their Applications* (Complex Networks '20), pp. 142-153, online, December 1-3, 2020.
- [24] Rennard V., Nikolentzos G., and Vazirgiannis M., "Graph Auto-Encoders for Learning Edge Representations", In Proceedings of the 9th International Conference on Complex Networks and Their Applications (Complex Networks '20), pp. 117-129, online, December 1-3, 2020.
- [25] Wu C., <u>Nikolentzos G.</u>, and Vazirgiannis M., "EvoNet: A Neural Network for Predicting the Evolution of Dynamic Graphs", *In Proceedings of the 29th International Conference on Artificial Neural Networks* (ICANN '20), pp. 594–606, online, 2020.
- [26] Skianis K., <u>Nikolentzos G.</u>, Limnios S. and Vazirgiannis M., "Rep the Set: Neural Networks for Learning Set Representations", *In Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics* (AISTATS '20), pp. 1410-1420, online, 2020.
- [27] Nikolentzos G., Tixier A. and Vazirgiannis M., "Message Passing Attention Networks for Document Understanding", *In Proceedings of the 34th AAAI Conference on Artificial Intelligence* (AAAI '20), pp. 8544-8551, New York, USA, February 7-12, 2020. [Acceptance rate: 20.6%]
- [28] Wu C., Nikolentzos G. and Vazirgiannis M., "Matching Node Embeddings Using Valid Assignment Kernels", *In Proceedings of the 8th International Conference on Complex Networks and Their Applications* (Complex Networks '19), Vol 1, pp. 810-821, Lisbon, Portugal, December 10-12, 2019.
- [29] Tixier A., Nikolentzos G., Meladianos P. and Vazirgiannis M., "Graph Classification with 2D Convolutional Neural Networks", *In Proceedings of the 28th International Conference on Artificial Neural Networks: Workshop and Special Sessions* (ICANN '19), pp. 578-593, Munich, Germany, September 17-19, 2019.
- [30] Steenfatt N., Nikolentzos G., Vazirgiannis M. and Zhao Q., "Learning Structural Node Representations on Directed Graphs", *In Proceedings of the 7th International Conference on Complex Networks and Their Applications* (Complex Networks '18), pp. 132-144, Cambridge, United Kingdom, December 11-13, 2018.
- [31] Nikolentzos G. and Vazirgiannis M., "Enhancing Graph Kernels via Successive Embeddings", In Proceedings of the 27th International Conference on Information and Knowledge Management (CIKM '18), pp. 1583-1586, Turin, Italy, October 22-26, 2018.
- [32] Nikolentzos G., Meladianos P., Tixier A., Skianis K. and Vazirgiannis M., "Kernel Graph Convolutional Neural Networks", *In Proceedings of the 27th International Conference on Artificial Neural Networks* (ICANN '18), pp. 22-32, Rhodes, Greece, October 4-7, 2018.
- [33] Nikolentzos G., Meladianos P., Limnios S. and Vazirgiannis M., "A Degeneracy Framework for Graph Similarity", *In Proceeding of the 27th International Joint Conference on Artificial Intelligence* (IJCAI '18), pp. 2595-2601, Stockholm, Sweden, July 13-19, 2018.

- [34] Meladianos P., Xypolopoulos C., <u>Nikolentzos G.</u>, and Vazirgiannis M., "An Optimization Approach for Sub-event Detection and Summarization in Twitter", *In Proceedings of the 40th European Conference on Information Retrieval* (ECIR '18), pp. 481-493, Grenoble, France, March 26-29, 2018.
- [35] Nikolentzos G., Meladianos P., Stavrakas Y. and Vazirgiannis M., "K-clique-graphs for Dense Subgraph Discovery", *In Proceedings of the 2017 European Conference on Machine Learning and Principles and Practice of Knowledge Discovery* (ECML-PKDD '17), pp. 617-633, Skopje, Fyrom, September 18-22, 2017.
- [36] Nikolentzos G., Meladianos P., Rousseau F., Stavrakas Y. and Vazirgiannis M., "Shortest-Path Graph Kernels for Document Similarity", *In Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing* (EMNLP '17), pp. 1890-1900, Copenhagen, Denmark, September 7-11, 2017.
- [37] Meladianos P., Tixier A., <u>Nikolentzos G.</u>, and Vazirgiannis M., "Real-Time Keyword Extraction from Conversations", *In Proceedings of the 15th European Chapter of the Association for Computational Linguistics* (EACL '17), pp. 462-467, Valencia, Spain, April 3-7, 2017.
- [38] Nikolentzos G., Meladianos P., Rousseau F., Stavrakas Y. and Vazirgiannis M., "Multivariate Gaussian Document Representation from Word Embeddings for Text Categorization", *In Proceedings of the 15th European Chapter of the Association for Computational Linguistics* (EACL '17), pp. 450-455, Valencia, Spain, April 3-7, 2017.
- [39] Nikolentzos G., Meladianos P. and Vazirgiannis M., "Matching Node Embeddings for Graph Similarity", *In Proceedings of the 31st AAAI Conference on Artificial Intelligence* (AAAI '17), pp. 2429-2435, San Francisco, USA, February 4-9, 2017.
- [40] Meladianos P., Nikolentzos G., Rousseau F., Stavrakas Y. and Vazirgiannis M., "Degeneracy-based Real-Time Sub-Event Detection in Twitter Stream", In Proceedings of the 9th AAAI International Conference on Web and Social Media (ICWSM '15), pp. 248-257, Oxford, United Kingdom, May 26-29, 2015.

# BOOK CHAPTERS

[41] Nikolentzos G., Panagopoulos G., Evdaimon I. and Vazirgiannis M., "Can Author Collaboration Reveal Impact? The Case of h-index", book chapter in *Predicting the Dynamics of Research Impact*, pp. 177-194, Springer International Publishing, 2021.

# WORKSHOP PUBLICATIONS

[42] Qabel A., Ennadir S., Nikolentzos G., Lutzeyer J., Chatzianastasis M., Boström H. and Vazirgiannis M., "Structure-Aware Antibiotic Resistance Classification Using Graph Neural Networks", *In 3rd AI for Science workshop*, New Orleans, USA, December 2, 2022.

#### **TUTORIALS**

- [43] Vazirgiannis M., Nikolentzos G. and Siglidis G., "Machine Learning on Graphs with Kernels", *In Proceedings of the 28th International Conference on Information and Knowledge Management* (CIKM '19), pp. 2983-2984, Beijing, China, November 3-7, 2019.
- [44] Vazirgiannis M., Malliaros F. and Nikolentzos G., "GraphRep: Boosting Text Mining, NLP and Information Retrieval with Graphs", *In Proceedings of the 27th International Conference on Information and Knowledge Management* (CIKM '18), pp. 2295-2296, Turin, Italy, October 22-26, 2018.

# CONFERENCE TALKS

• Title: "Mass Enhanced Node Embeddings for Drug Repurposing"
Presented at the 12th Hellenic Conference on Artificial Intelligence (SETN '22), Corfu, Greece, 2022.

- Title: "An Empirical Study of the Expressiveness of Graph Kernels and Graph Neural Networks"
  - Presented at the 30th International Conference on Artificial Neural Networks (ICANN '21), online, 2021.
- Title: "Image Classification Using Graph-Based Representations and Graph Neural Networks"
  - Presented at the 9th International Conference on Complex Networks and Their Applications (Complex Networks '20), online, 2020.
- Title: "Message Passing Attention Networks for Document Understanding"
   Presented at the 34th AAAI Conference on Artificial Intelligence (AAAI '20), New York, USA, 2020.
- Title: "Graph Classification with 2D Convolutional Neural Networks"
   Presented at the 28th International Conference on Artificial Neural Networks (ICANN '19), Munich, Germany, 2019.
- Title: "A Degeneracy Framework for Graph Similarity"

  Presented at the 27th International Joint Conference on Artificial Intelligence (IJCAI '18),

  Stockholm, Sweden, 2018.
- Title: "Shortest-Path Graph Kernels for Document Similarity" Presented at the 2017 Conference on Empirical Methods in Natural Language Processing (EMNLP '17), Copenhagen, Denmark, 2017.
- Title: "Matching Node Embeddings for Graph Similarity"
   Presented at the 31st AAAI Conference on Artificial Intelligence (AAAI '17), San Francisco, USA, 2017.

## INVITED TALKS

- Title: "Introduction to Graph Neural Networks"

  Presented at the HIAS summer school in Artificial Intelligence, Athens, Greece, 2024.
- Title: "Towards more Intuitive Graph Neural Networks via Trainable Latent Graph Layers" Presented at the Learning on Graphs (LoG) local meetup in Paris, France, 2023.
- Title: "What Do GNNs Actually Learn? Towards Understanding their Representations" Presented at the Complex Networks Analysis discussion group of the National Center for Scientific Research "Demokritos", Athens, Greece, 2023.
- Title: "Creating Synthetic Patient Trajectories with Graph Generative Models" Presented at the 20th International Workshop on Mining and Learning with Graphs, Turin, Italy, 2023.
- Title: "Random Walk Graph Neural Networks"
   Presented at the Complex Networks Analysis discussion group of the National Center for Scientific Research "Demokritos", Athens, Greece, 2021.
- Title: "k-hop Graph Neural Networks"

  Presented at the Knowledge Engineering Group (KEG) of Tsinghua University, Beijing, China, 2019.
- Title: "Learning on Graphs: The Problem of Graph Classification" Presented at the Noah's Ark Lab of Huawei Technologies, Paris, France, 2018.
- Title: "Using Graph Kernels to Address the Graph Similarity and Learning Problems" Presented at the Noah's Ark Lab of Huawei Technologies, Paris, France, 2018.

- Title: "Using Graph Kernels to Address the Graph Similarity and Learning Problems" Presented at the kickoff meeting of the ESIGMA project, Paris, France, 2018.
- Title: "Dense Subgraph Discovery and Applications"
  Presented at the Workshop on Social Media Processing, Changsha, China, 2016.

#### OTHER TALKS

Title: "Machine Learning on Graphs with Kernels"
 Tutorial presented at the 28th International Conference on Information and Knowledge Management, Beijing, China, 2019.

#### **GRANTS**

#### Awarded

Principal Investigator, "Anything2Graph: Representing Data as Graphs with Applications in Machine Learning", State Scholarships Foundation, 26 400€, January 1, 2020 to December 31, 2021.

# ADVISING AND MENTORING

#### **Graduate Students**

Gaspard Michel 2022

MSc Thesis director: Prof. Michalis Vazirgiannis

MSc Thesis topic: "Path Neural Networks: Expressive and Accurate Graph Neural Networks"

Virgile Rennard 2020

MSc Thesis director: Prof. Michalis Vazirgiannis

MSc Thesis topic: "Graph Auto-Encoders for Learning Edge Representations"

Michalis Thomas 2020

MSc Thesis director: Prof. Michalis Vazirgiannis

MSc Thesis topic: "Graph Learning Algorithms for Object Detection"

Armita Khajeh-Nassiri 2018

MSc Thesis director: Prof. Michalis Vazirgiannis

MSc Thesis topic: "Hierarchical Attention Network for Graph Classification"

Niklas Steenfatt 2018

MSc Thesis director: Prof. Michalis Vazirgiannis

MSc Thesis topic: "Learning Structural Node Representations on Directed Graphs"

Changmin Wu 2018

MSc Thesis director: Prof. Michalis Vazirgiannis

MSc Thesis topic: "Matching Node Embeddings using Valid Assignment Kernels"

## Christos Xypolopoulos

MSc Thesis director: Prof. Michalis Vazirgiannis

MSc Thesis topic: "Applying Machine Learning Methods to Posts Collected from Twitter"

2017

# TEACHING EXPERIENCE

## University of Peloponnese, Tripoli, Greece

Instructor 2024 to present

- Artificial Intelligence
  - Undergraduate course.
  - Covered the following topics: Solving problems by searching (e.g., breadth-first search, depth-first search, A\*-search), local search algorithms, constraint satisfaction problems, adversarial search and zero-sum games (e.g., minimax algorithm), propositional logic and first-order logic, probabilistic reasoning, bayesian networks.

Guest Lecturer 2021 to 2023

- Advanced Learning for Text and Graph Data (ALTeGraD)
  - Graduate-level course in text and graph mining
  - Main instructor: Prof. Michalis Vazirgiannis
  - Lectures: "Graph Mining" and "Graph Neural Networks"

*Lab Instructor* **2018 to 2023** 

- Advanced Learning for Text and Graph Data (ALTeGraD)
  - · Graduate-level course in text and graph mining
  - Responsible for lecture and supervision of laboratory.
  - Students implemented community detection techniques, graph kernels for addressing
    graph classification tasks, unsupervised node embedding methods for node classification tasks, graph neural networks for learning node- and graph-level representations
    and graph generative models.

# Athens University of Economics and Business, Athens, Greece

Instructor 2021 to present

- Data Science Challenge
  - The course covered practical topics in data management and data analysis, including data collection and processing, data visualization, statistical models and machine learning techniques, and big data approaches to create scalable solutions. In addition, student were introduced to recent methods from the field of natural language processing (e.g., large language models) and graph representation learning (e.g., graph neural networks).
  - Students had to participate in an in-class Kaggle competition. Last two challenges:
    - Domain Name Classification Challenge (https://www.kaggle.com/c/inf342-datachallenge-2024)
    - Publication Venue Prediction Challenge (https://www.kaggle.com/c/inf342-datachallenge-2023)

Lab Instructor October 2013

- · Data Mining
  - Undergraduate course.
  - Developed Jupyter Notebooks for the practical sessions which covered the following topics: introductory concepts in machine learning (data preprocessing, feature selection, dimensionality reduction, exploratory analysis), supervised learning algorithms (linear regression, logistic regression, k-nn, decision trees), unsupervised learning algorithms (k-means clustering, EM algorithm, spectral clustering), neural networks/deep learning models, text mining (text categorization), and graph mining (node centrality measures, community detection, graph classification).
- · Operations Research
  - Undergraduate course.
  - Prepared and delivered tutorial sessions (solved problems in front of the class) which
    covered the following topics: formulation of optimization problems (linear/non-linear
    problems, convex/non-convex problems, continuous/integer/mixed programming), unconstrained optimization (derivative test, search algorithms), constrained optimization (Lagrange method, Karush-Kuhn-Tucker conditions, solution algorithms), linear
    programming (simplex algorithm, interior point methods), and dynamic programming (dynamic programming as a recursive procedure, recursive algorithm).

## PROFESSIONAL SERVICE

#### **International Journals**

#### **Editorial Service**

• Transactions on Machine Learning Research

#### Reviewer

- · Journal of Machine Learning Research
- Neurocomputing
- IEEE Signal Processing Letters
- Machine Learning
- · Information and Inference
- IEEE Transactions on Knowledge and Data Engineering
- Pattern Recognition
- Pattern Recognition Letters
- Transactions on Machine Learning Research (Expert Reviewer)
- Knowledge and Information Systems
- ACM Transactions on Knowledge Discovery from Data
- Scientific Reports
- · PLOS One
- Expert Systems With Applications
- Information Sciences
- Applied Intelligence
- Applied Network Science
- Automation in Construction
- npj Digital Medicine
- Computers in Biology and Medicine
- IEEE Access
- The Computer Journal
- Natural Language Engineering
- Chemometrics and Intelligent Laboratory Systems
- Facta Universitatis, Series: Mathematics and Informatics
- IEEE Transactions on Cybernetics

#### **International Conferences**

# Area Chair, Meta Reviewer

- Conference on Neural Information Processing Systems (NeurIPS), 2024
- Annual Conference of the Association for Computational Linguistics (ACL), 2023
- Conference on Empirical Methods in Natural Language Processing (EMNLP), 2023

#### Reviewer

- Conference of the European Chapter of the Association for Computational Linguistics (EACL), 2021, 2023
- Conference on Empirical Methods in Natural Language Processing (EMNLP), 2020, 2021, 2022
- Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT), 2021
- Annual Conference of the Association for Computational Linguistics (ACL), 2020, 2021, 2022
- Conference on Neural Information Processing Systems (NeurIPS), 2016, 2020, 2021, 2022, 2023 (top reviewer)
- International Conference on Machine Learning (ICML), 2021, 2022, 2023 2024
- International Conference on Artificial Intelligence and Statistics (AISTATS), 2022, 2023 (top reviewer), 2024

- AAAI Conference on Artificial Intelligence (AAAI), 2017, 2018, 2021 (top 25% of Program Committee Members), 2022
- International Conference on Learning Representations (ICLR), 2022, 2023, 2024 (outstanding reviewer)
- International Joint Conference on Artificial Intelligence (IJCAI), 2017, 2024
- International Conference on Artificial Neural Networks (ICANN), 2018, 2019, 2021, 2022, 2023

## Workshops

#### Reviewer

- Joint Workshop on Narrative Understanding, Storylines, and Events (NUSE), 2020
- Workshop on Graph-Based Methods for Natural Language Processing (TextGraphs), 2019 2020
- International Workshop on Mining Actionable Insights from Social Networks (MAISoN), 2018, 2019, 2021
- International Workshop on Assessing Impact and Merit in Science (AIMinScience), 2020
- International Workshop of Deep Learning for Graphs and Structured Data Embedding (DL4G-SDE), 2019
- International Workshop on Learning Representations for Big Networks (BigNet), 2018

# Software

- Contributed to the development and maintenance of the GraKeL library (available at: https://github.com/ysig/GraKeL). This is a Python package that includes implementations of several graph kernels. The package has received more than 580 stars from GitHub users.
- Code of most research papers available at my personal GitHub page: https://github.com/giannisnik.

## LANGUAGES

Greek (Native); English; French (Intermediate)

# PROFESSIONAL MEMBERSHIPS

• Technical Chamber of Greece