#### PERSONAL INFORMATION

# Panagiotis D. Oikonomou

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Sex Male | Date of birth 28/01/1986 | Nationality Greek

#### **EDUCATION AND TRAINING**

#### Diploma in Computer & Communication Engineer 2008

University of Thessaly, Dept. of Computer Telecommunications and Network Engineering, Volos, Greece.

#### 2010 MSc in Computer & Communication Engineer

University of Thessaly, Dept. of Computer Telecommunications and Network Engineering, Volos, Greece.

#### PhD 2017

University of Thessaly, Dept. of Electrical and Computer Engineer, Volos, Greece.

Thesis title: "Temporospatial Organization of Circuits and Tasks over the Cloud" (under the supervision of Prof. George Stamoulis).

#### 2018 Post Doc (in progress)

University of Thessaly, Dept. of Informatics and Telecommunications, Lamia, Greece.

Research: "Task Scheduling and Orchestration Over the Cloud" (under the supervision of Prof. George Stamoulis).

#### **AWARDS**

2003 Awarding of "First Among Firsts" as a high school graduate with the highest grade within the framework of the program "The Great Moment for Education," established by Eurobank EFG since 2003.

2003 Excelled in the subject of Logic Design and was given the opportunity to attend Seminars for the Leonardo & Modelsim tools.

#### RESEARCH EXPERIENCE

#### 21/12/2021 - present File: RE\_07\_1 to \_3

### RE-07) Associate Research Scientist

University of Thessaly Research Committee

Participation in the project: SILVANUS: Integrated Technological and Information Platform for Wildfire Management Funded under: Horizon 2020

Responsibilities: Participation in the analysis of system requirements and the study of the research area of interest.

#### 06/07/2021 - 30/9/2023

#### RE-06) Associate Research Scientist

File: RE\_06\_1,\_2 University of Thessaly Research Committee

> Participation in the project: ParICT CENG: Improvement of ICT research infrastructures in Central Greece to process large volumes of data from sensor streams, multimedia and complex mathematical simulation models.

Funded under: Regional Excellence

Responsibilities: WP5 - Development of high-performance parallel processing infrastructures. WP2 - Design and development of algorithms for parallel processing of multiple data streams.

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10/03/2021 - 31/03/2021

RE-05) Assistant Research Scientist

File: RE 05

University of Thessaly Research Committee

Participation in the project: MAG FoS Taxonomy (Microsoft Academic Graph Field of Study Taxonomy)

Responsibilities: Specification and Semantic Modeling of Bibliographic Data

05/2019 -- 11/2019 Files: PE\_04\_1,\_2 RE-04) Visiting Scholar

South University of Science and Technology of China. Shenzhen, Guangdong, China

Responsibilities: Apply interval scheduling in cloud and high-performance computing (HPC). Explore solutions for the Workflow Scheduling problem: experiments conducted on-demand, spot, and pre-emptive cloud instances.

23/03/2020 - 31/12/2020

RE-03) Assistant Research Scientist

File: RE\_03 University of Thessaly Research Committee

Participation in the project: GeoMake-It: Integrated system for developing and conducting geo-games .

Funded under: Research-Create-Innovate, EYDE-ETAK.

Responsibilities: Research and development of software and algorithms to orchestrate the processes generated by the GeoGameLang language in the Cloud version of the GeoMake-It platform. Writing Deliverables: System Design and Architecture, Geo-Game Development Language Design and Implementation.

01/12/2015 - 31/12/2015

RE-02) Senior Research Associate

File: RE\_02 University of Thessaly Research Committee

Participation in the project: SMS: Sensing toxicants in Marine waters makes Sense using biosensors.

Funded under: FP7 - Food, Agriculture and Biotechnology

Responsibilities: Completion and Testing of the Prototype Measurement System in the Laboratory.

01/06/2015 - 31/05/2016

RE-01) Senior Research Associate

Files: RE\_01\_1 to 03\_1

Centre for Research & Technology Hellas (CERTH)

Participation in the project: "ISS-EWATUS".

Funded under: FP7 - Information & Communication Technologies.

Responsibilities: Planning and developing forecasting algorithms for water demand using intelligent algorithms, fuzzy cognitive maps, environment Development for Urban Decision Support System"

#### PROFESSIONAL EXPERIENCE

08/02/2024 - present

RE-06) Software Engineer

File: PE\_04\_4 University of Thessaly

Participation in the project: Supporting the activities of the Center for Psychological and Counseling Support

Responsibilities: Support in KESYPSYS databases.

01/01/2023 - present Files: PE 03 5 to 03 10

RE-05) Software Engineer

National and Kapodistrian University of Athens

Participation in the project: Traineeship OF EDUCATION STUDENTS

Funded under: Human Resource Development, Education and Lifelong Learning 2014-2020

Responsibilities: Support for the operation of the EKPA internship office 1) Management and enrichment of the website of the internship office, 2) Support of the information subsystem of the internship (Microdata), 3) Support in the interface with the ATLAS information system.

the interface with the ATLAS information system.

14/03/2022 - 31/10/2023

RE-04) Software Engineer

Files: PE\_04\_1 to 04\_3

University of Thessaly Research Committee

Participation in the project: Υποστήριξη Παρεμβάσεων Κοινωνικής Μέριμνας Φοιτητών του Πανεπιστημίου Θεσσαλίας.

Responsibilities: Computer systems designers, analysts and programmers. D2.1: Reports recording students who received support or participated in Center activities. D2.3: Report and statistical processing of data resulting from the electronic evaluation sheet of the services offered, which is completed anonymously by the students who address the Center. D2.4: Creation and enrichment of the Center website, production and publication on the website of special informative and advisory material, and administrative/secretarial support of the Center. D3.1: Updated websites, websites and social networks

#### 01/09/2016 - 30/11/2022

#### RE-03) Software Engineer

Files: PE 03 1 to 03 4

TEI of Central Greece.

Participation in the project: Central Actions for the Internship of the Departments of TEI of Central Greece

Funded under: Human Resource Development, Education and Lifelong Learning 2014-2020

Implementation and Support of Information Systems-web portal of TEI Stereas. Technical

Support of the information systems - web portal of the TEI of Central Greece

#### 21/09/2015 - 31/10/2015

#### RE-02) Software Engineer

File: PE 02

Eastern Macedonia and Thrace Institute of Technology

Participation in the project PEGA - DEVELOPMENT OF MOBILE PHONE APPLICATIONS ".

Funded under: lifelong learning

Responsibilities: Training Material Development - Teaching preparation, progress assessment, Trainee trainings (2

cycle teaching hours - 180 and training material preparation hours 20)

#### 13/02/2012 - 31/08/2013

# RE-01) Software Engineer

File: PE 01

Gnomon Pliroforiki. Thessaloniki, Greece

Participation in the project "Development and Improvement of Financial Planning and Financial Management

Systems for Hospitals using a Computerized Document System ".

Responsibilities: Consultative IT support of the Health District. Consulting. Hospital IT Support Services.

#### 2011-Present File: PE 00

#### RE-00) Freelancer Engineer

Production of computer programs, produced or completed to order. Internet website creation services. Computer and peripheral equipment installation services. Technical support services for information technologies. Network management services.. Professional training services P.D.K.A.

Indicative Websites:

https://praktiki.uoa.gr/, https://kesypsys.uth.gr/, https://dit.uth.gr/, https://eypsste.gr/

#### **TEACHING EXPERIENCE**

#### 25/11/2022 - 31/12/2022

#### 6) Adjunct Lecturer

File: TE 06

Department of Digital Systems - Recovery and Resilience Fund - Greece 2.0

Participation in the project: precision agriculture

Responsibilities: Teaching Geographical Information Systems. Sensor networks. Microcontrollers

#### 2019-Present

#### 5) Adjunct Lecturer

School of Pedagogical and Technological Education – ASPETE. Master program EDUCATIONAL APPLICATIONS WITH STEM SCIENCE.

File: TE 05 1,2

Ac. Year: 2021-22

Digital Objects and Repositories - Augmented and Virtual Reality

Development platforms, robotics and IoT in education

File: TE 05 3

Ac. Year: 2022-23

Digital Objects and Repositories - Augmented and Virtual Reality

File: TE 05 4

Ac. Year: 2023-24

Digital Objects and Repositories - Augmented and Virtual Reality

4) Adjunct Lecturer 2019-Present University of Thessaly, Master Program - Computer Science and Biomedical Informatics File: TE 04 1 Ac. Year: 2022-23 Internet Technologies, Networking Infrastructure and Internet Applications File: TE 04 2 Ac. Year: 2021-22 Internet Technologies, Networking Infrastructure and Internet Applications File: TE 04 3 Ac. Year: 2020-21 Internet Technologies, Networking Infrastructure and Internet Applications File: TE 04 4 Ac. Year: 2019-20 Internet Technologies, Networking Infrastructure and Internet Applications File: TE\_04\_5 Ac. Year: 2018-19 Internet Technologies, Networking Infrastructure and Internet Applications 3) Adjunct Lecturer 2015-Present University of Thessaly, Dept. of Computer Science and Telecommunications, Lamia (Independent Teaching) File: TE 07 Ac. Year: 2023-24 Circuit Simulation Algorithms, Game Architecture and Development, Optimization Theory Acquiring academic teaching experience for young PhD scientists (Independent Teaching) File: TE 03 6 Ac. Year: 2022-23 Circuit Simulation Algorithms, Optimization Theory, Game Architecture and Development File: TE 03 5 Ac. Year: 2021-22 Circuit Simulation Algorithms, Optimization Theory, Τεχνολογίες Διαδικτύου File: TE 03 4 Ac. Year: 2020-21 Circuit Simulation Algorithms, Optimization Theory, Τεχνολογίες Διαδικτύου File: TE 03 3 Ac. Year: 2019-20 Circuit Simulation Algorithms, Optimization Theory, Τεχνολογίες Λογισμικού File: TE\_03\_2 Ac. Year: 2018-19 Circuit Simulation Algorithms, Optimization Theory, Έλεγχος & Τυπική Επιβεβαίωση File: TE 03 1 Ac. Year: 2017-18 Circuit Simulation Algorithms, Operating Systems Supplementary teaching

File: TE 02

File: TE\_02 Ac. Year: 2016-17

WWW Technologies, Introduction to Computers, Design and Analysis of Algorithms

Ac. Year:2015 - 2016

WWW Technologies, Introduction to Computers, Design and Analysis of Algorithms

#### 2010-2018

File: TE\_03\_1

#### 2) Adjunct Lecturer

Technological Educational Institute of Central Greece. Dept. of Computer Engineering Teaching Assistant

Ac. Year: 2010-11

Artificial Intelligence (Independent Teaching)

Ac. Year: 2011-12

Artificial Intelligence, Automated Control Systems

Ac. Year: 2012-13

Artificial Intelligence, Automated Control Systems, Automata and Regular Languages (Independent Teaching)

Ac. Year: 2013-14

Artificial Intelligence, Automata and Regular Languages (Independent Teaching), Software Engineering, Operating Systems, Distributed Systems, Special topics on Distributed Systems

Ac. Year: 2014-15

Artificial Intelligence, Automata and Regular Languages, Object Oriented Programming, Distributed Systems, Special topics on Distributed Systems, Data Structures

Ac. Year: 2015-16

Artificial Intelligence, Operating Systems, Design and Analysis of Algorithms, Distributed Systems, Special topics on Distributed Systems, Data Structures

Ac. Year: 2016-17

Artificial Intelligence, Software Engineering, Operating Systems, Design and Analysis of Algorithms, Distributed Systems

Ac. Year: 2017-18

Artificial Intelligence, Parallel Systems (Independent Teaching), Distributed Systems, Operating Systems, Special topics on Distributed Systems

Technological Educational Institute of Central Greece. Dept. of Electrical Engineering

Ac. Year:2014-15 Digital Design Ac. Year:2016-17 Digital Design

#### 2008-2014 1) Computer Science Teacher

Public Institute of Vocational Training, Volos, Greece

Ac. Year 2008-09

Software and applications Technology

Ac. Year 2009-10

Data Structures, Image Processing

Ac. Year 2010-11 Data Structures, SQL

Ac. Year 2011-12

Data Networks, Tools for Creating 3D Graphics (3D Studio)

Public Institute of Vocational Training, Lamia, Greece

Ac. Year 2010-11

Networks Administration, Data Structures, Image Processing

Ac. Year 2014-15

Internet Applications and Development Tools, Computer Peripheral Units, Personal computer

Ac. Year 2015-16

C++, Tools for Creating 3D Graphics, Game Construction Tools

Public Institute of Vocational Training (Manpower Employment Organization), Lamia

Ac. Year 2010-11

SQL, Multimedia, Web Technologies

Ac. Year 2011-12

Distributed Applications, Computer Security

Ac. Year 203-14 Pascal, Data Networks

#### **TRAININGS**

Files: EDU\_01 to \_05

#### 2013 Foreign language: English (C1+)

Test of Interactive English (TIE)

#### 2014 Statement of Accomplishment for VLSI CAD: Logic to Layout

University of Illinois at Urbana-Champaign's Online Coursera

This course surveys the fundamental CAD algorithms and data structures used to build modern VLSI chips, and covers essential synthesis and verification methods for VLSI logic and layout design.

2022 Special Education and Training

University of the Aegean

2022 School Psychology

University of the Aegean

2022 Certificate of Pedagogical and Teaching Proficiency

University of Thessaly

# RESEARCH INTERESTS

Current

Research interests fall in the general area of optimization problems.

Cloud Computing Information systems

Process Scheduling Problems

Cloud Computing

Heuristic and Population Algorithms

Past Fuzzy Logic, VLSI Placement, Video Transcoding, Fuzzy Cognitive Maps

COMMITTEES / REVIEING

Special Issue Editor

Video Coding, Processing, and Delivery for Future Applications

Editorial Member

Internet of Things and Cloud Computing (IOTCC)

Journal / Conference Reviewing

Operational Research: An International Journal (ORIJ)

IET – Big Data Recommender Systems: Recent Trends and Advances

Journal of Concurrency and Computation Practice and Experience

IEEE Consumer Communications & Networking Conference

IEEE International Symposium on Network Computing and Applications (NCA) International Conference on Data Science, Technology and Applications (DATA)

**IEEE Access** 

IEEE/IFIP Network Operations and Management Symposium (NOMS)

MDPI Electronics, Entropy Journal of Web Engineering

CLOUD-EDGE CONTINUUM (CEC) WORKSHOP

Research Laboratories

VDCloudTec: VIDEO & CLOUD TECHNOLOGIES LABORATORY

DigitalNeuro: DIGITAL NEUROPSYCHOLOGICAL EVALUATION LABORATORY

iPRISM: Intelligent Pervasive Systems

PUBLICATIONS Books

[B1] Oikonomou, P., 2017. Temporospatial Organization of Circuits and Tasks over the Cloud. Doctoral dissertation (Ph.D.), University of Thessaly, Dept. of Electrical and

Computer Engineer, Volos, Greece. Available online at: <u>link</u>

**Patents** 

Busy time optimization for the interval scheduling problem via a threshold-based approach. In collaboration with Southern University of Science and Technology (SUSTECH), Shenzhen, Guangdong China. **Under review** 

Journals Papers

[J12] Integrated Portable and Stationary Health Impact Monitoring System for Firefighters. Sensors. (SUBMITTED)

**[J11]** s-ERP: a Smoke-based Evacuation Route Planning System for Enhancing Public Safety. Fire Safety. (**SUBMITTED**)

**[J10]** A Proactive and Uncertainty Driven Management Mechanism for Workflows of Processing Tasks. Computing. (**SUBMITTED**)

- **[J9]** Zygouris, N. C., Botsoglou, K., Dimitriou, G., Axelou, O., <u>Oikonomou, P</u>. ., Beazidou, E. ., & Tziallas, G. D. . (2023). Implementing a Web Application Screener for Preschoolers: Executive Functions and School Readiness. International Journal of Engineering Pedagogy (iJEP), 13(6), pp. 123–138. https://doi.org/10.3991/ijep.v13i6.38399
- [J8] Dadaliaris, A., Kranas, G., <u>Oikonomou, P.</u>, Floros, G., & Dossis, M. (2022). Exploiting Net Connectivity in Legalization and Detailed Placement Scenarios. Information, 13(5), 212.
- [J7] Oikonomou, P., Tziritas, N., Loukopoulos, T., Theodoropoulos, G., Hanai, M., & Khan, S. U. (2021). Online Algorithms for the Interval Scheduling Problem in the Cloud: Affinity Pair Threshold Based Approaches. IEEE Transactions on Sustainable Computing, 7(2), 441-455.
- **[J6] Oikonomou, P.**, Karanika, A., Anagnostopoulos, C., & Kolomvatsos, K. (2021). On the Use of Intelligent Models towards Meeting the Challenges of the Edge Mesh. *ACM Computing Surveys (CSUR)*, *54*(6), 1-42.
- [J5] <u>Oikonomou, P.</u>, Dadaliaris, A., Kolomvatsos, K., Loukopoulos, T., Kakarountas, A., & Stamoulis, G. (2019). Improved Parallel Legalization Schemes for Standard Cell Placement with Obstacles. Technologies, 7(1), 3.
- [**J4**] Zygouris, N. C., Vlachos, F., Dadaliaris, A. N., <u>Oikonomou, P.</u>, Stamoulis, G. I., Vavougios, D. & Striftou, A. (2017). A neuropsychological approach of developmental dyscalculia and a screening test via a web application. International Journal of Engineering Pedagogy (iJEP), 7(4), 51-65.
- [J3] <u>Oikonomou, P.</u>, Koziri, M. G., Tziritas, N., Loukopoulos, T., & Cheng-Zhong, X. U. (2017). Scheduling Heuristics for Live Video Transcoding on Cloud Edges. ZTE Communications, (2), 7.
- [J2] Dadaliaris, A. N., <u>Oikonomou, P.</u>, Koziri, M. G., Nerantzaki, E., Loukopoulos, T., & Stamoulis, G. I. (2017). A connectivity-based legalization scheme for standard cell placement. Circuits and Systems, 8(08), 191.
- [J1] Dadaliaris, A. N., <u>Oikonomou, P.</u>, Koziri, M. G., Nerantzaki, E., Hatzaras, Y., Garyfallou, D., ... & Stamoulis, G. I. (2017). Heuristics to augment the performance of Tetris legalization: making a fast but inferior method competitive. Journal of Low Power Electronics, 13(2), 220-230.

# Conferences Papers (peer-reviewed)

- [C36] REAL-TIME MONITORING OF WILDFIRE POLLUTANTS FOR HEALTH IMPACT ASSESSMENT. 2024 IEEE International Geoscience and Remote Sensing Symposium (SUBMITTED)
- C[35] K. Kranas, M. Sapounaki, I. Kampitsis, <u>P. Oikonomou</u>, A. Aretaki, G. Spathoulas, A. Kakarountas., & M. Adam (2023, September). Enhancing the Hill Cipher Algorithm for Robust and Efficient Image Security. In 21ST INTERNATIONAL CONFERENCE OF NUMERICAL ANALYSIS AND APPLIED MATHEMATICS (ICNAM 2023) (ACCEPTED)
- [C34] Kranas, G. K., Dadaliaris, A. N., <u>Oikonomou, P.</u>, & Dossis, M. (2022, September). Scavenging PyPi for VLSI Packages. In 2022 7th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM) (pp. 1-6). IEEE.
- [C33] Gkika, S., Zygouris, N., Galantomos, I., <u>Oikonomou, P.</u>, Dimitriou, G., Kopsidas, S., & Stamoulis, G. (2022). WEB-ASSESSING FOREIGN LANGUAGE ACQUISITION OF MIXED ABILITY PRIMARY SCHOOL PUPILS TO ENHANCE DIFFERENTIATED FLIPPED BLENDED LEARNING. In *ICERI2022 Proceedings* (pp. 4871-4880). IATED.
- **[C32]** Oikonomou, P., Tziritas, N., Kolomvatsos, K., & Loukopoulos, T. (2021, November). Fast Heuristics for Mixed Fleet Capacitated Multiple TSP with Applications to Location Based Games and Drone Assisted Transportation. In Proceedings of the 25th Pan-Hellenic Conference on Informatics (pp. 294-299).
- [C31] Pappas, N., Oikonomou, P., Tziritas, N., Kolomvatsos, K., & Loukopoulos, T. (2021, November). Bin Packing Heuristics for the Multiple Workflow Scheduling Problem. In Proceedings of the 25th Pan-Hellenic Conference on Informatics (pp. 283-288).
- [C30] Dadaliaris, A. N., Kranas, G. K., <u>Oikonomou, P.</u>, & Dossis, M. (2021, September). Variations on a Connectivity-based Legalizer for Standard Cell Design. In 2021 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM) (pp. 1-5). IEEE.

- [C29] Kranas, G. K., Dadaliaris, A. N., <u>Oikonomou, P.</u>, Floros, G., & Dossis, M. (2021, September). Redesign, Extensibility & Evaluation of a Placement Utilities Toolset. In 2021 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM) (pp. 1-5). IEEE.
- [C28] Oikonomou, P., Kolomvatsos, K., Anagnostopoulos, C., Tziritas, N., & Theodoropoulos, G. (2021, November). A Probabilistic Batch Oriented Proactive Workflow Management. In 2021 IEEE 33rd International Conference on Tools with Artificial Intelligence (ICTAI) (pp. 1242-1246). IEEE.
- [C27] Oikonomou, P., Kolomvatsos, K., & Loukopoulos, T. (2020, November). Resource Provisioning Schemes for Multiple Workflow Scheduling with Seclusion Requirements. In 24th Pan-Hellenic Conference on Informatics (pp. 386-389).
- [C26] Oikonomou, P., Kolomvatsos, K., Tziritas, N., Theodoropoulos, G., Loukopoulos, T., & Stamoulis, G. (2020, November). Uncertainty Driven Workflow Scheduling Using Unreliable Cloud Resources. In 2020 IEEE 19th International Symposium on Network Computing and Applications (NCA) (pp. 1-8). IEEE.
- [C25] Oikonomou, P., Tziritas, N., Theodoropoulos, G., Koziri, M., Loukopoulos, T., & Khan, S. U. (2020, December). Graph-based Approaches for the Interval Scheduling Problem. In 2020 IEEE 26th International Conference on Parallel and Distributed Systems (ICPADS) (pp. 649-654). IEEE.
- [C24] Dimitriadis, V., Oikonomou, P., Papadopoulos, P. K., Panagou, N., Dadaliaris, A. N., & Loukopoulos, T. (2020, October). GeoMakelt!: A Platform for Developing Location Based Games. In 2020 15th International Workshop on Semantic and Social Media Adaptation and Personalization (SMA (pp. 1-6). IEEE.
- [C23] Kranas, G. K., Kouskouras, T. G., Dimitriadis, V., Dossis, M., Oikonomou, P., & Dadaliaris, A. N. (2020, September). A Novel Genetic Algorithm for I/O Pad Planning Retaining Former Cell Positions. In 2020 5th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM) (pp. 1-5). IEEE.
- [C22] Karanika, A., Oikonomou, P., Kolomvatsos, K., & Anagnostopoulos, C. (2020, August). An Ensemble Interpretable Machine Learning Scheme for Securing Data Quality at the Edge. In International Cross-Domain Conference for Machine Learning and Knowledge Extraction (pp. 517-534). Springer, Cham.
- **[C21**] Karanika, A., <u>Oikonomou, P.</u>, Kolomvatsos, K., & Loukopoulos, T. (2020, July). A Demand-driven, Proactive Tasks Management Model at the Edge. In 2020 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE) (pp. 1-8). IEEE.
- [C20] Panagou, N., Koziri, M., Papadopoulos, P. K., <u>Oikonomou, P.</u>, Tziritas, N., Kolomvatsos, K., ... & Khan, S. U. (2019, June). Evaluation of Heterogeneous Scheduling Algorithms for Wavefront and Tile Parallelism in Video Coding. In International Conference on Internet of Things (pp. 16-27). Springer, Cham.
- [C19] Panagou, N., Oikonomou, P., Papadopoulos, P. K., Koziri, M., Loukopoulos, T., & lakovidis, D. (2019, May). On Predicting Bottlenecks in Wavefront Parallel Video Coding Using Deep Neural Networks. In International Conference on Engineering Applications of Neural Networks (pp. 501-510). Springer, Cham.
- [C18] Kolomvatsos, K., <u>Oikonomou, P.</u>, Koziri, M., & Loukopoulos, T. (2018, October). A Distributed Data Allocation Scheme for Autonomous Nodes. In 2018 IEEE SmartWorld, Ubiquitous Intelligence & Computing, Advanced & Trusted Computing, Scalable Computing & Communications, Cloud & Big Data Computing, Internet of People and Smart City Innovation (SmartWorld/SCALCOM/UIC/ATC/CBDCom/IOP/SCI) (pp. 1651-1658). IEEE.
- [C17] Kranas, G., Tsalamagkakis, G. C., <u>Oikonomou, P.</u>, & Dadaliaris, A. N. (2018, September). PyPUT: Python-based Placement Utilities Toolset. In 2018 South-Eastern European Design Automation, Computer Engineering, Computer Networks and Society Media Conference (SEEDA\_CECNSM) (pp. 1-4). IEEE.
- [C16] Oikonomou, P., Koziri, M. G., Tziritas, N., Dadaliaris, A. N., Loukopoulos, T., Stamoulis, G. I., & Khan, S. U. (2018, July). Scheduling Video Transcoding Jobs in the Cloud. In 2018 IEEE International Conference on Internet of Things (iThings) and IEEE Green Computing and Communications (GreenCom) and IEEE Cyber, Physical and Social Computing (CPSCom) and IEEE Smart Data (SmartData) (pp. 442-449). IEEE.
- [C15] Oikonomou, P., Dadaliaris, A. N., Loukopoulos, T., Kakarountas, A., & Stamoulis, G. I. (2018, May). A Tetris-based legalization heuristic for standard cell placement with obstacles. In 2018 7th International Conference on Modern Circuits and Systems

- Technologies (MOCAST) (pp. 1-4). IEEE.
- [C14] Zygouris, N. C., Vlachos, F., Dadaliaris, A. N., Oikonomou, P., Stamoulis, G. I., Vavougios, D., ... & Striftou, A. (2016, September). The implementation of a web application for screening children with dyslexia. In International Conference on Interactive Collaborative Learning (pp. 415-423). Springer, Cham.
- [C13] Mantos, K., Koungalis, N., Demesiotis, G., Oikonomou, P., Dadaliaris, A. N., & Stamoulis, G. I. (2017, September). WEVIAN: A Web-based Placement Visualizer/Analyzer. In Proceedings of the 21st Pan-Hellenic Conference on Informatics (p. 16). ACM.
- [C12] Zygouris, N. C., Stamoulis, G. I., Vlachos, F., Vavougios, D., Dadaliaris, A. N., Nerantzaki, E., <u>Oikonomou, P.</u>, & Striftou, A. (2017, April). Screening for Disorders of Mathematics via a web application. In 2017 IEEE Global Engineering Education Conference (EDUCON) (pp. 502-507). IEEE.
- [C11] Dadaliaris, A. N., <u>Oikonomou, P.</u>, Koziri, M. G., Hatzaras, Y., & Stamoulis, G. I. (2017, September). SCIZER: A scalable placement visualizer/analyzer. In 2017 South Eastern European Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM) (pp. 1-4). IEEE.
- [C10] Oikonomou, P., Koziri, M. G., Dadaliaris, A. N., Loukopoulos, T., & Stamoulis, G. I. (2017, May). Domocus: Lock free parallel legalization in standard cell placement. In 2017 6th International Conference on Modern Circuits and Systems Technologies (MOCAST) (pp. 1-4). IEEE.
- [C9] Dadaliaris, A. N., Nerantzaki, E., Koziri, M. G., <u>Oikonomou, P.</u>, Loukopoulos, T., & Stamoulis, G. I. (2016, November). Performance evaluation of Tetris-based legalization heuristics. In Proceedings of the 20th Pan-Hellenic Conference on Informatics (p. 60). ACM.
- [C8] Loukopoulos, T., Koziri, M. G., Kolomvatsos, K., & Oikonomou, P. (2018, March). On Green Scheduling for Desktop Grids. In World Conference on Information Systems and Technologies (pp. 330-340). Springer, Cham.
- [C7] Oikonomou, P., Koziri, M. G., Dadaliaris, A. N., Hatzaras, Y., Nerantzaki, E., & Stamoulis, G. I. (2016, September). Heuristics for Iterative Detailed Standard Cell Placement. In Proceedings of the SouthEast European Design Automation, Computer Engineering, Computer Networks and Social Media Conference (pp. 19-24). ACM.
- [C6] Zygouris, N. C., Vlachos, F., Dadaliaris, A. N., <u>Oikonomou, P.</u>, Stamoulis, G. I., Vavougios, D., ... & Striftou, A. (2016, September). The implementation of a web application for screening children with dyslexia. In International Conference on Interactive Collaborative Learning (pp. 415-423). Springer, Cham.
- [C5] Dadaliaris, A. N., Nerantzaki, E., <u>Oikonomou, P.</u>, Hatzaras, Y., Troumpoulou, A. O., Arvanitakis, I., & Stamoulis, G. I. (2016, September). Enhanced Tetris Legalization. In Proceedings of the SouthEast European Design Automation, Computer Engineering, Computer Networks and Social Media Conference (pp. 32-35). ACM.
- [C4] Oikonomou, P., Loukopoulos, T., Dadaliaris, A. N., Koziri, M. G., & Stamoulis, G. I. (2015, October). On formulating and tackling integrated circuit placement as a scheduling problem. In Proceedings of the 19th Panhellenic Conference on Informatics (pp. 86-91). ACM.
- [C3] Antonios N Dadaliaris, <u>Panagiotis D Oikonomou</u>, George Dimitriou, Georgios I Stamoulis, VDA Place+: Voltage-Drop-Aware Placement, PACET. Special Session on High-Level Synthesis, CAD systems and Applications, 2015
- [C2] <u>Oikonomou, P.</u>, & Papageorgiou, E. I. (2013, September). Particle swarm optimization approach for fuzzy cognitive maps applied to autism classification. In IFIP International Conference on Artificial Intelligence Applications and Innovations (pp. 516-526). Springer, Berlin, Heidelberg.
- [C1] Papageorgiou, E., <u>Oikonomou, P.</u>, & Kannappan, A. (2012). Bagged Nonlinear Hebbian Learning Algorithm for Fuzzy Cognitive Maps Working on Classification Tasks. Artificial Intelligence: Theories and Applications, 157-164.

**GRADUATE THESES** 

The publications ([J8],[C13], [C23-24], [C29-31], [C34-35]) involved students who were undergraduates at the time of publication. A large number of Graduate Theses in which Mr. Oikonomou was Supervisor, Co-supervisor or Member of the Examination Committee are related to Cloud Computing and Modern Information Systems.

University of Thessaly. Department of Informatics and Telecommunications, Lamia Member of the Examination Committee - Co-supervision

- Scheduling algorithms and visualization techniques for process flow management in cloud computing
- 2. Educational spelling improvement app for students
- 3. Integrating a Recommendation ChatBot into Unmanned Aerial Vehicles
- Shopper Psychology and Its Influence on Product Choice: A Comparative Study of Widely Used Websites
- 5. Implementation of a ChatBot for Indoor Navigation Assistance

#### TEI of Central Greece, Department of Informatics Engineering, Lamia

#### Supervisor

- 6. Implementation of online application for solving electronic issues
- 7. Analytical data and laptop hardware comparison
- 8. Creating an Android application with educational materials and assessment tests for middle-high school students
- 9. Registration and documentation management platform
- Full and functional website of a virtual restaurant installed locally using the WordPress content management system
- 11. Application of machine-human interaction in graphical environment in Android software
- 12. Infrastructure configuration for monitoring a server using the Sensa Framework
- 13. Development of online software for visualizing digital circuits
- 14. Creating an online environment for educational robotics courses
- Creation of a dynamic online application for the promotion of local products of the Municipality of Volos outside the prefecture of Magnesia
- 16. Implementation of a dynamic web-based e-secretariat application
- 17. Modern multi-agent systems
- 18. Create a dynamic website for content real estate management
- Creation and development of a website for a restaurant using a content management system (CMS) Joomla
- 20. Mobile application implementation using the Google Android platform
- Graphical environment in HTML and PHP for music schools in Greece and specifically for the Music School of Lamia
- 22. Electronic medical data management service
- 23. Development of e-courses with Moodle technology
- 24. Dynamic application with C# programming language
- 25. Create Programming an educational application for the Scratch environment
- 26. Development of a news portal in CMS Joomla
- 27. Bibliographic study of artificial self-organizing agents and their applications
- 28. Management and implementation with content management suite

#### Member of the Examination Committee - Co-supervision

- 29. Implementation of a mobile phone application using the google android platform
- 30. Man in the middle attacks via arp protocol and http proxy servers and countermeasures

- 31. Module development for C.M.S.Joomla
- 32. Development of a distance learning platform using moodle
- 33. Synchronous machine learning algorithms
- 34. Study and application of deep learning techniques
- 35. 4g and 4g+ services and functions. Pros cons and new versions of 4g and 4g+.
- 36. Tourist guide for the city of Lamia using php and sql technologies
- 37. Investigating scenarios for the implementation of optical technologies in metropolitan networks
- 38. Secret electronic voting application with file upload and download capabilities for smartphones.
- A preliminary study to develop a self-education tool for cruise ship crews to deal with and prevent norovirus outbreaks
- 40. Presentation of application development methodology on android mobiles.
- 41. Development of an online store using joomla and virtuemart
- 42. Development of a website application using google maps.
- 43. Online store of organic products and healthy nutrition using joomla
- 44. Creation with source codes of an online computer sales store <<socrates>>
- 45. Methodology and simulation study of fuzzy cognitive networks with application to the environment
- 46. Construction of a website on the wordpress platform
- 47. Creation of an online store selling riding accessories using wordpress.
- 48. Research and implementation of network applications and functions using tor browsing
- 49. Development of a web site for graduate theses management
- 50. Voting for android smartphones.
- 51. Game development in android environment
- 52. Creating -programming an educational application for the scratch environment
- 53. Development of fuzzy cognitive network modeling algorithm
- 54. Application of machine-human interaction in a graphical environment in android software
- 55. Comparative study and evaluation of security applications in social networking media
- 56. Study of electronic consultation systems.
- 57. Study of neuro-fuzzy systems for prediction problems
- Interactive 3d application (animated) for simulation with webgl technologies and the auxiliary library babylon.Js
- 59. Creating an adventure type game on the android operating system
- 60. Development of numerical calculation application on the arduino platform
- 61. Development of an online application in the field of travel medicine
- 62. Development of a website for product exchange
- 63. News website development
- 64. Development of a website for the promotion of the prefecture of Magnesia
- 65. Programmable Logic Controller plc, programming applications of simatic s7-200/cpu214
- 66. Development of a Spanish learning website using zoomla
- 67. Analysis and use of the needleman and wuneh algorithm for pattern recognition in bioinformatics.
- 68. Investigation and optimization of minimum spanning tree algorithms
- 69. Implementation of interactive distance learning technologies distance education
- 70. Agent moving algorithms in wsns
- 71. Load balancing in cloud systems
- 72. Development of an online tourist application
- 73. Robotic vehicle with follower
- 74. Security in mobile e-commerce
- 75. Development of an electronic laboratory material inventory system using php-mysql
- 76. Creation of an online store for computer systems
- 77. Online store development with the dynamic web management system joomla and the virtuemart extension

- 78. Design and implementation of an application using the responsive web design method
- 79. Electronic recruitment system
- 80. Development of educational material for the course operating systems in a joomla environment
- 81. Attacks on web services and countermeasures
- 82. Development of interactive application for smart devices
- 83. Study and application of deep learning techniques
- 84. Blog construction.
- 85. Nanotechnology with applications in computing systems technology
- 86. Application of graphical display of measurements
- 87. Investigation and implementation of security breach scenarios in wireless networks
- 88. Location memorization and finder app for mobile phones
- 89. Development of a shopping store web application (eshop) using the amazon api
- 90. Protocols and security mechanisms in cloud computing

# RECOMMENDATION LETTERS

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