



**George Pallis** received his BSc (2001) and Ph.D. (2006) degree in Department of Informatics of Aristotle University of Thessaloniki (Greece). Currently, he is associate professor at the Computer Science Department, University of Cyprus and Associate Director of Laboratory of Internet Computing. His research interests include Distributed and Internet Computing with particular focus on Big Data Analytics, and Cloud/Edge/Fog Computing. Dr. Pallis is one of the programme directors of the Data Science Master programme at University of Cyprus. He is principal institutional investigator in research projects funded by EC, Research Promotion Foundation in Cyprus, and industry (e.g., Google) and has totally attracted more than 5,1 M euro. Dr.

Pallis has published over 100 papers in international journals (e.g., IEEE TKDE, IEEE TCC, IEEE TSC, ACM TOIT, Scientific Reports etc), magazines (e.g., CACM, IEEE Internet Computing) and conferences (e.g., INFOCOM, IPDPS, ICDCS, SEC, IoTDi, ICWSM, BIG DATA etc) and he is contributor of two international DIN (German Institute for Standardization) standards. His papers have been cited more than 5400 times with h-index 29 (Source: Google Scholar). Dr. Pallis has served as PC-Co-chair of CloudCom 2018 and CCGrid 2019. Dr. Pallis has also served in numerous Program and Organization Committees for international conferences (WWW, ICDCS, CONEXT, BIG DATA etc.) and he received the best paper awards in IEEE CloudCom 2024, IEEE/ACM UCC 2023, IEEE IoTDi 2022, IEEE ISCC 2022, IEEE BIG DATA 2016, ICSOC 2014 and the best demo award in the ACM/IEEE Symposium on Edge Computing. In 2019, Dr. Pallis served as guest editor for the edge computing special issue on the prestigious Proceedings of the IEEE journal. Dr Pallis is appeared in the World's Top 2% Scientists list published by Stanford University and he is golden core member of IEEE Computer Society. He was Editor in Chief (EIC) in the IEEE Internet Computing magazine (2019-2023) and Associate Editor in the IEEE Transactions on Cloud Computing. Currently, he is EIC Emeritus in the IEEE Internet Computing magazine, Associate Editor in IEEE Reliability Magazine and Associate Editor in the Computing Journal (Springer).

## Research Highlights

### Editorial Activities

- **Editor in Chief** in IEEE Internet Computing Magazine (2019-2023)
- **Editorial board member** of IEEE Transactions on Cloud Computing (2020-2022)
- **Editor in Chief Emeritus** in IEEE Internet Computing Magazine (2024-present)
- **Editorial board member** of Computing Journal
- **Editorial board member** in IEEE Reliability Magazine
- **Guest editorial** in IEEE Proceedings Journal
- **AdCom member (elected)** in IEEE Reliability Society (2022-present)

### 5,1 M EURO R&D Funding at UCY

- **Scientific and/or Technical Coordinator** of RAINBOW H2020 project (Budget: 5M EUR – UCY: 501K EUR), UNICORN H2020 project (Budget: 4.1M EUR – UCY: 675K EUR), ICARUS H2020 project (Budget: 4M EUR – UCY: 279K EUR) and PaaSPort FP7 project (Budget: 2.1M EUR – UCY: 280K EUR).
- **Training Coordinator of RAIS Marie Curie ITN** (Budget: 3.6M EURO – UCY: 707K EURO)
- **Co-Principal Institutional Investigator** for AI-DAPT Horizon Europe project (Budget: 9M EUR – UCY: 435K EUR), ATHENA Horizon Europe Project (Budget: 3,2M EUR – UCY: 260K EUR), HoLoCIM, RIF (Budget: 600K EUR – UCY: 290K EUR), SYNERGY H2020 project (Budget: 10 Million EUR – UCY: 358K EUR), iSocial Marie Curie ITN Project, FP7 (Budget: 3.7 Million EUR – UCY: 650K EUR) and MANDOLA, Monitoring DG-JUSTICE, EU (Budget: 1 Million EUR – UCY: 150K EUR), CELAR FP7 (Budget: 3.5 Million EUR – UCY: 590,000 EUR), PERSONAS, RPF (Budget: 200K EUR – UCY: 63K EUR), ARRANGE-ICT ERASMUS+ (Budget: 202K EUR – UCY: 34K EUR), 3 COMPLIMENTARY PROJECTS, RPF (Total budget: 75K EUR), AdaptoFlow (TrialsNet Horizon Europe - Budget: 200K EUR UCY: 106K EUR, April 2024), GreenAnalyzer (aerOS Horizon Europe - Budget: 60K, April 2024), PowerStorm (6G Sandbox Horizon Europe- Budget: 30K, April 2024)
- **Google DNI grant** for fake news identification on Social media

### Publications

- **Over 100 publications in journals (IEEE TCC, IEEE TSC, Scientific Reports etc) and conferences (INFOCOM, SEC, IoTDi, ICDCS, ICWSM, ASONAM, Big Data etc).**
- **7 Awards in top-tier conferences:** Best Paper in IEEE CloudCom 2023, Best Paper (2<sup>nd</sup> place) in IEEE/ACM UCC 2023, Best Paper in IEEE IoTDi 2022, Best student paper in IEEE ISCC 2022, Best Paper in IEEE BigData 2016 (900 registered participants / 79 regular papers selected from 423 full paper submissions from 1597 authors and co-authors at 40 countries), Best Paper in ICSOC 2014 (24 regular papers selected from 160 full paper submissions), Best Demo in IEEE/ACM SEC 2020 Conference.
- **5400+ citations, h-index: 29** – source: Google Scholar
- **World's Top 2% Scientists list** – source: <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3>
- **Golden core member of IEEE Computer Society (2024 – present)** <https://www.computer.org/volunteering/awards/golden-core>

### International Standards Contribution

- Contributor of the **first international DIN (German Institute for Standardization) SPEC standard**
- Contributor of the **DIN (German Institute for Standardization) CEN standard for analytics insights and scaling policies for Microservices**

### **Conferences Organization/Participation**

- **General Chair in IEEE IC2E 2024**
- **General Co-Chair in IEEE/ACM SEC 2024**
- **General Co-Chair in GEC 2024**
- **Program Co-Chair of CloudCom 2018, CCGrid 2019 conferences**
- **Steering Committee member in CCGrid**
- Participating in **100+ Programme Committees** and **25+ Organization Committees** for International Conferences/Workshops

### **Phd Supervision/co-supervision**

- **5 Phd students** in topics (Fog Computing Emulation; Big Data Applications in Entrepreneurship; Detect Polarized Topics; Exercise Habits and Social Contagion Patterns)
- **4 Phd students** defended their Phd thesis
- **External Examiner for 12 PhD students** at other Institutions

### **Education**

- **Aristotle University of Thessaloniki**, Greece  
Ph.D. in Computer Science, June 2006  
Dissertation: *Data Management on the Web*
- **Aristotle University of Thessaloniki**, Greece  
B.Sc. in Computer Science, June 2001

### **Faculty Appointments**

- **University of Cyprus**, Nicosia, Cyprus  
*Associate Professor*, Dept. of Computer Science, January 2020 – present
- **University of Cyprus**, Nicosia, Cyprus  
*Assistant Professor (tenure-track)*, Dept. of Computer Science, December 2014 – December 2019
- **University of Cyprus**, Nicosia, Cyprus  
*Lecturer*, Dept. of Computer Science, January 2010 – December 2014

## Honors/Awards

- Golden core member of IEEE Computer Society (2024-present)  
<https://www.computer.org/volunteering/awards/golden-core>
- World Top 2% scientists – Stanford list (2020 – present) source:  
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6>
- Selected in EU Innovation Radar: “Fogify: A Fog Computing Emulator Framework for testing data intensive IoT services”, 2023
- Selected in EU Innovation Radar: “RAINBOW open and secured fog computing platform that aims to advance the management of extensible, diverse and safe IoT services and cross-cloud applications”, 2023
- Best Paper in IEEE CloudCom 2023 International Conference, December 2023
- Best Paper (2<sup>nd</sup> place) in IEEE/ACM UCC 2023 International Conference, December 2023
- Best Paper in IEEE IoTDi 2022 International Conference, 2022
- Best student paper in IEEE ISCC 2022 International Conference, 2022
- Best Demo in IEEE/ACM SEC 2020 International Conference, December 2020
- Student Best Paper award IEEE Big Data Conference, December 2016
- Best Paper award ICSOC 2014 Conference, May 2014
- Google Teaching Faculty, London, December 2018
- Post-doc Marie-Curie Fellowship.
- 10-month scholarship from the Dept. of Informatics, Aristotle University of Thessaloniki (funded by the Research Committee of A.U.TH.). Research Committee of AUTH awards one PhD student in each university department for student outstanding performance (2003).
- Full PhD Scholarship from the Greek Ministry of Education under the HRACLEITOS project (2002-2005)

### **International Research Collaborations (including short visits, joint publications, R&D projects, co-supervision Phds)**

- KTH, Sweden (Prof. Sarunas Girdzijauskas)
- TUW, Austria (Prof. Schahram Dustdar)
- University of Insubria, Italy (Prof. Elena Ferrari, Prof. Barbara Catania)
- University of Delaware, USA (Prof. Weisong Shi)
- IMDEA, Spain (Prof. Antonio Fernandez Anta)
- Warrick University, UK (Prof. Nikos Nicolaou)
- Aristotle University of Thessaloniki (Prof. Athena Vakali, Prof. Anastasios Gounaris)
- NTUA, Greece (Prof. Nektarios Kozyris, Prof. Dimitrios Tsoumakos)
- University of Crete, Greece (Prof. Evangelos Markatos, Prof. Angelos Bilas)
- University of Melbourne, Australia (Prof. Raj Buyya)
- University of Innsbruck, Austria (Prof. Sashko Ristov)

### **Research Collaboration at UCY (joint publications, R&D projects)**

- Assistant Professor Andreas Anastasiou (Mathematics and Statistics Department)
- Associate Professor Elias Athanasopoulos (Computer Science Department)
- Professor Marios Dikaiakos (Computer Science Department)
- Professor Chryssis Georgiou (Computer Science Department)
- Professor George Georghiou (Computer Electrical and Engineering Department)
- Professor Ioannis Krikidis (Computer Electrical and Engineering Department)
- Assistant Professor Christos Nicolaidis (Business and Public Administration Department)
- Professor Andreas Othonos (Physics Department)
- Associate Professor Vasos Vasileiou (Computer Science Department)
- Assistant Professor Haris Volos (Computer Science Department)
- Professor Demetris Zeinalipour (Computer Science Department)

## Editorial Activities

- **Editor in Chief** in IEEE Internet Computing Magazine (2019-2023)
- **Editorial board member** of IEEE Transactions on Cloud Computing (2020-2022)
- **Editor in Chief Emeritus** in IEEE Internet Computing Magazine (2024-present)
- **Editorial board member** in IEEE Reliability Magazine
- **Associate editor in Chief** in IEEE Internet Computing magazine (2015-Dec 2018)
- **Member of the Editorial Board** in IEEE Transactions on Cloud Computing (2018-2022) (Impact Factor: 7,908)
- **Member of the Editorial Board** in IEEE Internet Computing magazine (2010-2015). **Edit the View from the Cloud” Department** (2010-2021)
- **Member of the editorial** board in Computing Journal, Springer (2016-present)
- **Guest-editor** – IEEE Proceedings Journal (Impact factor: 9.237), special issue on “Edge Computing”, 2019.
- **Member of the editorial** board in International Journal on Internet and Distributed Computing Systems (IJIDCS) (2010-1012)
- **Guest-editor** - IEEE Internet Computing special issue (Mar-Apr 2018) Healthcare Informatics and Privacy
- **Guest-editor** - Computer Networks, special issue on "Internet-based Content Delivery". (Aug. 2011)
- **Guest-editor** - IEEE Network, special issue on "Cloud Computing" (Jul. 2011)
- **Guest-editor** - IEEE Internet Computing special issue (Sep. 2009) on Cloud Computing.
- **Editorial Advisory Board Member** of the book "Advancements in Distributed Computing and Internet Technologies: Trends and Issues", Al-Sakib Khan Pathan, Mukaddim Pathan, Hae Young Lee. Idea Group Publishing.
- **Editorial Advisory Board Member** of the book "Next Generation Content Delivery Infrastructures", G. Fortino, C. Palau. Idea Group Publishing.
- **Co-editor** of the book “Web Data Management Practices: Emerging Techniques and Technologies.” Idea Group Publishing.

## Conference & Workshop Organization

- **General Chair** of the 12th IEEE International Conference on Cloud Engineering (IC2E 2024)
- **General Co-Chair** of the 9th ACM/IEEE Symposium on Edge Computing (SEC 2024)
- **General Co-Chair** of the 6th Gender Equality Computing Symposium (GEC 2024)
- **Travel Grant Co-chair** of the 20th International Conference on emerging Networking EXperiments and Technologies (CoNEXT 2024)
- **Poster and Demo Chair of the** 29th International European Conference on Parallel and Distributed Computing (Euro-Par 2023)
- **Workshop co-chair** of the 1st Int. Workshop on Data Analytics for Personal & Ubiquitous Computing (DATUM 23), March 28 2023 (Co-located with EDBT/ICDT joint Conference – Ioannina, Greece)
- **Program co-Chair** of the 19th IEEE/ACM International Symposium on Cluster, Cloud, and Grid Computing (CCGrid 2019), May 2019.
- **Demo co-Chair**, Web Intelligence 2019 - IEEE/WIC/ACM International Conference on Web Intelligence
- **Program Chair** of the 10th IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2018), December 2018.
- **Sponsor co-Chair** of the 16th Hellenic Data Management Symposium.

- **Proceedings and Publicity Chair** of the 3rd International Workshop on Algorithmic Aspects of Cloud Computing (ALGO CLOUD 2017)
- **Track chair** on "Business Informatics Infrastructure" at the 19th IEEE Conference on Business Informatics (CBI 2017)
- **Sponsor co-chair** on 8th IFIP International Conference on New Technologies, Mobility and Security (NTMS 2016) Proceedings chair on 8th IEEE/ACM Conference of Utility and Cloud Computing (UCC 2015)
- **Local Arrangement Co-Chair** in the 20th IEEE Symposium on Computers and Communications (ISCC 2015)
- **Workshop co-chair** of the "Online Social Networks: Emerging Trends in Research and Innovation", Oct 2014.
- **Publicity Chair** in 15th International Conference on Web Information System Engineering (WISE 2014)
- **Workshop co-chair** of the "Complexity in Online Social Networks and Big Data", Satellite Workshop of the European Conference on Complex Systems ECCS 2013
- **Local organization co-chair** of the 8th International Wireless Communications & Mobile Computing Conference (IWCMC)
- **Local organization co-chair** of 10th IEEE IFIP Annual Mediterranean Ad Hoc Networking Workshop.
- **Co-chair on the Workshop Committee** of the 9th International Conference on Service-Oriented Computing (ICSOC'2011)
- **Co-chair of Cloud Computing Track** on 6th Mediterranean Conference of Information Systems (MCIS 2011)
- **Workshop co-chair** in the 6th IEEE International Workshop on UPGRADE-CN 2011 in conjunction with CCGrid 2011.
- **Publicity Chair** in 18th IEEE International Conference on Telecommunications 2011 (ICT 2011)
- **Workshop co-chair** in the 5th IEEE International Workshop on Content Delivery Networks (CDN 2010) in conjunction with CCGrid 2010.
- **Demos & Exhibits Co-Chair** in the International Conference: 2010 High Performance Computing & Simulation (HPCS'10).
- **Poster Chair** in the International Conference: 2009 High Performance Computing & Simulation (HPCS'09).
- **Poster Chair** in the International Conference: 2008 High Performance Computing & Simulation (HPCS'08).

### Technical Programme Committees of Conferences and Workshops

- 33rd ACM International Conference on Information and Knowledge Management (CIKM 2024)
- 11th IEEE International Conference on Data Science and Advanced Analytics (DSAA 2024)
- 18th International Conference on Network and System Security (NSS 2024)
- IEEE Big Data 2024
- ISC High Performance 2024
- The ACM Web Conference (WebConf 2024)
- 44th IEEE International Conference on Distributed Computing Systems (ICDCS 2024)
- The 2nd International Workshop on Urgent Analytics for the Computing Continuum (QUICK 2024)
- 8th ACM/IEEE Symposium on Edge Computing (SEC 2023)
- 15th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2023)
- The ACM Web Conference (WebConf 2023)

- IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing (CCGrid 2023)
- 43rd IEEE International Conference on Distributed Computing Systems (ICDCS 2023)
- 2nd International Workshop on Urgent Analytics for the Computing Continuum
- International Symposium on Algorithmic Aspects of Cloud Computing (ALGO CLOUD 2023)
- 32nd ACM International Conference on Information and Knowledge Management WISE Conference (WISE 2023)
- The 32nd ACM International Conference on Information and Knowledge Management (CIKM 2023)
- ISC High Performance 2023
- 10th International Conference on Behavioural and Social Computing (BESC 2023)
- 9th European Conference and Service-Oriented and Cloud Computing (ESOCC 2022)
- 22nd IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing (CCGRID 2022)
- The 23rd conference series on Web Information Systems Engineering International Conference on Web Information System Engineering (WISE 2022)
- The 2022 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2022)
- 7th ACM/IEEE Symposium on Edge Computing (SEC 2022)
- 2nd International Conference on Deep Learning, Big Data and Blockchain 2021
- 6h ACM/IEEE Symposium on Edge Computing (SEC 2021)
- 41st IEEE International Conference on Distributed Computing Systems (ICDCS 2021)
- International Conference on the Economics of Grids, Clouds, Systems, and Services
- 22nd International Conference on Web Information Systems Engineering (WISE 2021)
- ACM/IEEE International Conference on Social Network Analysis and Mining 2021 (ASONAM 2021)
- 8th IEEE International Conference on Cloud Engineering (IC2E 2020)
- Program Chair of the ACM WebConf 2020 (formerly known as ACM WWW Conference)
- 20th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2020)
- 20th International Conference on Web Engineering
- The 29th International Conference on Computer Communications and Networks
- IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2020)
- The 5th International Conference on Big Data Innovations and Applications (Innovate-Data 2019)
- IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2019)
- 39th IEEE International Conference on Distributed Computing Systems (ICDCS 2019)
- ACM WebConf 2019 (formerly known as ACM WWW Conference)
- 6th IEEE International Conference on Cloud Engineering (IC2E 2018)
- 18th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2018)
- IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2018)
- 23th IEEE International Symposium on Computer and Communications (IEEE ISCC 2018)
- 19th International Conference on Web Information System Engineering (WISE 2018)
- International conference on Big Data and Advanced Wireless technologies (BDAW 2018)
- 18th International Conference on Web Information System Engineering (WISE 2017)
- 28th International Conference on Database and Expert Systems Applications (DEXA 2017)



- 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2017)
- IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2017)
- IEEE International Workshop on Privacy and Security in Big Data EcoSystem (PSBD 2017), in conjunction with IEEE ICDCS
- 22nd IEEE International Symposium on Computer and Communications (IEEE ISCC 2017)
- 17th International Conference on Web Information System Engineering (WISE 2016)
- 21th IEEE International Symposium on Computer and Communications (IEEE ISCC 2016)
- Workshop on Privacy in Collaborative & Social Computing (PiCSoc 2016) Co-located with 2nd IEEE International Conference on Collaboration and Internet Computing (CIC 2016)
- 13th International Conference on Economics of Grids, Clouds, Systems, and Services
- 6th International Conference on Conference on Model & Data Engineering (MEDI 2016)
- 27th International Conference on Database and Expert Systems Applications (DEXA 2016)
- 2nd International Workshop on Algorithmic Aspects of Cloud Computing (ALGO CLOUD 2016)
- 9th International Conference on Internet and Distributed Computing Systems (IDCS 2016)
- 1st International Workshop on Multi-Engine Data AnaLytics (MEDAL 2016) Collocated with EDBT 2016
- 18th IEEE Mediterranean Electrotechnical Conference (IEEE MELECON 2016)
- Poster Track - EDBT 2016
- 1st International Workshop on Multi-Engine Data AnaLytics (MEDAL 2016)
- IEEE International Conference on Collaboration and Internet Computing
- 1st International Workshop on Algorithmic Aspects of Cloud Computing (ALGO CLOUD 2015)
- 2015 International Conference on Cloud Computing and Big Data
- 1st International Workshop on Elasticity Engineering for Big Data Analytics (eBigDaC), in conjunction with IEEE International Conference on Big Data (IEEE BigData 2015)
- 16th International Conference on Web Information System Engineering (WISE 2015)
- 23th IEEE International Symposium on Modelling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS 2015)
- 15th International Conference on Web Engineering (ICWE 2015)
- 20th IEEE Symposium on Computers and Communications (ISCC 2015)
- 5th International Conference on Conference on Model & Data Engineering (MEDI 2015)
- 8th Internatioanal Conference on Internet and Distributed Computing Systems (IDCS 2015)
- 7th IEEE/ACM International Conference on Utility and Cloud Computing (Posters)
- 3rd IEEE International Conference on Cloud Engineering (IC2E 2015)
- 15th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2015)
- 15th International Conference on Web Information System Engineering (WISE 2014)
- 22nd IEEE International Symposium on Modelling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS 2014)
- 14th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2014)
- 14th International Conference on Web Engineering (ICWE 2014)
- 19th IEEE International Symposium on Computer and Communications (IEEE ISCC 2014)
- 25th International Conference on Database and Expert Systems Applications (DEXA 2014)
- 7th Internatioanal Conference on Internet and Distributed Computing Systems (IDCS 2014)
- International Workshop on Data-intensive Process Management in Large-Scale Sensor Systems (DPSS 2014): From Sensor Networks to Sensor Clouds", CCGrid Workshop 2014.
- 4th International Conference on Cloud Computing and Services Science (CLOSER 2014)

- 2nd IEEE International Conference on Cloud Engineering (IC2E 2014)
- 3rd International Conference on Green and Cloud Computing (CGC)
- 21st IEEE International Symposium on Modelling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS 2013)
- 18th IEEE International Symposium on Computer and Communications (IEEE ISCC 2013)
- 6th International Conference on Internet and Distributed Computing Systems (IDCS 2013)
- 13th International Conference on Web Engineering (ICWE 2013)
- 11th IEEE IFIP Annual Mediterranean Ad Hoc Networking Workshop
- 2013 International Conference on Computing, Networking and Communications, Cloud Computing and Networking Symposium (ICNC 2013)
- 24th International Conference on Database and Expert Systems Applications (DEXA'13)
- 18th IEEE International Conference on Parallel and Distributed Systems
- International Workshop on Data-intensive Process Management in Large-Scale Sensor Systems (DPMSS 2013): From Sensor Networks to Sensor Clouds", CCGrid Workshop 2013.
- 5th International Conference on Internet and Distributed Computing Systems (IDCS 2012)
- 10th IEEE IFIP Annual Mediterranean Ad Hoc Networking Workshop
- 23th International Conference on Database and Expert Systems Applications (DEXA'12)
- 12nd International Conference on Web Engineering (ICWE 2012)
- 2nd International Conference on Cloud Computing and Services Science (CLOSER 2012)
- International Workshop on Data-intensive Process Management in Large-Scale Sensor Systems (DPMSS 2012): From Sensor Networks to Sensor Clouds", CCGrid Workshop 2012.
- 22nd International Conference on Database and Expert Systems Applications (DEXA'11)
- 1st International Conference on Cloud Computing and Services Science (CLOSER 2011)
- 11th International Conference on Web Engineering (ICWE 2011)
- 2011 ACM International Conference on Intelligent Semantic Web – Services and Applications
- 2nd International Conference on Emerging Intelligent Data and Web Technologies (EIDWT-2011)
- 2nd IEEE World Congress on Computer Science and Information Engineering (CSIE 2011)
- International Workshop on Internet and Distributed Computing Systems (IDCS'10) in conjunction with IEEE 13th International Conference on Computer and Information Technology (ICCIT 2010)
- 2010 ACM International Conference on Intelligent Semantic Web – Services and Applications
- 2nd International IEEE workshop on Collaboration and Cloud Computing, 2010.
- 21st International Conference on Database and Expert Systems Applications -DEXA'10
- 20th International Conference on Database and Expert Systems Applications -DEXA'09
- International Workshop on Internet and Distributed Computing Systems (IDCS'09) in conjunction with IEEE 12th International Conference on Computer and Information Technology (ICCIT 2009)
- 4th ACM International Workshop on the Use of P2P, GRID and Agents for the Development of Content Networks (UPGRADE-CN'09), in conjunction with HPDC 2009
- International Workshop on Internet and Distributed Computing Systems (IDCS'08) in conjunction with IEEE 11th International Conference on Computer and Information Technology (ICCIT 2008)
- 1st, 2nd, 3rd, 4th, 5th and 6th IADIS European Conference on Data Mining (ECDM)

## **Journal Refereeing**

Refereeing research articles on a regular basis submitted to the following journals:

- IEEE Transactions on Knowledge and Data Engineering
- IEEE Transactions on Parallel and Distributed Systems

- IEEE Transactions on Cloud Computing
- IEEE Transactions on Big Data
- IEEE Transactions on Computers
- IEEE Transactions on Services Computing
- ACM TWEB
- ACM Transactions on Storage
- ACM Transactions on Mobile Computing
- ACM Computing Surveys
- ACM Computing Reviews
- IEEE Computer
- IEEE Internet Computing
- IEEE Multimedia
- IEEE Transactions on Information Technology in BioMedicine
- Information Processing & Management Journal (Elsevier)
- WWWJ (Springer)
- Computing (Springer)
- The Computer Journal (Oxford)
- Networks (Wiley)
- International journal of communication systems (Wiley)
- Concurrency and Computation: Practice and Experience (Wiley)
- WIREs Data Mining and Knowledge Discovery (Wiley)
- Computer & Electrical Engineering Journal (Elsevier)
- Journal of Parallel and Distributed Computing (Elsevier)
- Journal of Systems and Software (Elsevier)
- Journal of Information Systems (Elsevier)
- Omega, The International Journal of Management Science (Elsevier)
- Data Knowledge Engineering (Elsevier)
- Journal of Innovation in Digital Ecosystems (Elsevier)
- Computer Networks (Elsevier)
- Future Generation Computer Systems (Elsevier)
- Computer Communications (Elsevier)
- Journal of Network and Computer Applications (Elsevier)
- Distributed and Parallel Databases (Elsevier)
- Journal of Internet Services and Applications (Springer)

### **Professional Consultancies**

- **AdCom member (elected) in IEEE Reliability Society (2022-present)**
- **Member of the evaluation committee of CYPRUS TECHNOLOGY (ex BITE) AWARDS (2024)**
- **Member of Steering Committee of CCGrid (2019-present)**
- **Member of 2024 IEEE TCSVC Research Innovation Award (RIA) evaluation committee**
- **Member of 2023 IEEE TCI Distinguished Service Award evaluation committee**
- **Member of 2022 IEEE TCI Distinguished Service Award evaluation committee**
- **Member of the evaluation committee for the appointment of an Assistant Professor Position (Tenure Track) in TUW, Austria (2022)**
- **Member of the evaluation committee for faculty positions in Greek Universities (APELLA) (2020 – present)**
- **Evaluator for Hellenic Foundation for Research & Innovation (2022-2023)**

- **Open Calls H2020 Trublo evaluator** (2021-2022)
- **Member of the IEEE Magazine Operations Committee** (January 2019-December 2021)
- **Member of the IEEE Publications Board** (ex officio, non-voting member, January 2019-December 2021)
- **Member of the evaluation committee of CYPRUS TECHNOLOGY (ex BITE) AWARDS** (2022)
- **Member of Examination Committee for Central Bank of Cyprus**, November 2018
- **Member of the IEEE Computer Society Cloud Computing Initiative**, Future Technologies Sub-Strategy.
- **Member of the Team of Experts in Computer science programs in colleges in Cyprus**, Council of Educational Evaluation and accreditation
- **Member of Examination Committee for Pancyprian University Qualification Exams in Computer Science**, Ministry of Education and Culture, Cyprus, May 2013, May 2015, May 2016.
- **Advisory board member** for the MSc program “**Social Information Systems**”, Open University, Cyprus (2015-2017)
- **Reviewer of Regular Funding Competition**, funded by National Fund for Scientific & Technological Development (FONDECYT), 2009.
- **Member of the Cloud Expert Group**, European commission (October 2012)

#### **External Examiner for PhD students at other Institutions**

- **External Examiner** for PhD Thesis, University of Melbourne (January 2024) - Anupama Mampage, Advisor: Raj Buyya
- **External Examiner** for PhD Thesis, Aristotle University of Thessaloniki, Greece (February 2024) – Sofia Yfantidou, Advisor: Athena Vakali
- **External Examiner** for PhD Thesis, University of Crete, Greece (June 2023) – Thomas Marcioro, Advisor: Evangelos Markatos
- **External Examiner** for PhD Thesis, University of Lancaster, Cyprus (December 2022) – Kasenides Nicos, Advisor: Nearchos Paspalis
- **External Examiner** for PhD Thesis, TUWien, Austria (April 2022), Murturi Ilir, Advisor: Schahram Dustdar
- **External Examiner** for PhD Thesis, TUWien, Austria (July 2021), Avasalcai Cosmin, Advisor: Schahram Dustdar
- **External Examiner** for PhD Thesis, Cyprus University of Technology, Cyprus (July 2021), Papadamou Konstantinos, Advisor: Michalis Sirivianos
- **External Examiner** for PhD Thesis, Cyprus University of Technology, Cyprus (December 2020), Flores Marco Antonio Rodriguez, Advisor: Fragkiskos Papadopoulos
- **External Examiner** for PhD Thesis, NTUA, Greece (November 2018), Giannis Giannakopoulos, Advisor: Nektarios Kozyris
- **External Examiner** for PhD Thesis, University of Melbourne (July 2018), Heidari Daiollah, Advisor: Raj Buyya
- **External Examiner** for PhD Thesis, University of Insubria, Italy (February 2017), Albertini Davide Alberto, Advisor: Barbara Catania
- **External Examiner** for PhD Thesis, University of Insubria, Italy (September 2016), Bahri Leila, Advisor: Elena Ferrari

## Funded Projects

### Scientific Leader/Principal Investigator (PI)

- **AIDAPT: AI-Ops Framework for Automated, Intelligent and Reliable Data/AI Pipelines Lifecycle with Humans-in-the-Loop and Coupling of Hybrid Science-Guided and AI Models, HORIZON-CL4-2023-HUMAN-01-01: Efficient trustworthy AI - making the best of data (ADR partnership) Grant Agreement: 101135826. (1/2024-6/2027).** AI-DAPT brings forward a data-centric mentality in AI, that is effectively fused with a model-centric, science-guided approach, across the complete lifecycle of AI-Ops, by introducing end-to-end automation and AI-based systematic methods to support the design, the execution, the observability and the lifecycle management of robust, intelligent and scalable data-AI pipelines that continuously learn and adapt based on their context. AI-DAPT will design a novel AI-Ops / intelligent pipeline lifecycle framework cross-cutting the different business, legal/ethics, data, AI logic/models, and system requirements while always ensuring a human-in-the-loop (HITL) approach across five axis: “Data Design for AI”, “Data Nurturing for AI”, “Data Generation for AI”, “Model Delivery for AI”, “Data-Model Optimization for AI”. AI-DAPT will contribute to the current research and advance the state-of-the-art techniques and technologies across a number of research paths, including sophisticated Explainable AI (XAI)-driven data operations from purposing, harvesting/mining, exploration, documentation and valuation to interoperability, annotation, cleaning, augmentation and bias detection; collaborative feature engineering minimizing the data where appropriate; adaptive AI for model retraining purposes. Overall, AI-DAPT aims at reinstating the pure data-related work in its rightful place in AI and at reinforcing the generalizability, reliability, trustworthiness and fairness of AI solutions. In order to demonstrate the actual innovation and added value that can be derived through the AI-DAPT scientific advancements, the AI-DAPT results will be validated in two, interlinked axes: I. Through their actual application to address real-life problems in four (4) representative industries: Health, Robotics, Energy, and Manufacturing; II. Through their integration in different AI solutions, either open source or commercial, that are currently available in the market. **WP1 Leader. Budget: 4 Million EUR – UCY: 435,000 EUR.**
- **ATHENA: An exposition on THE forEign information mAnipulation and interference. HORIZON-CL2-2023-DEMOCRACY-01 (11/2023 – 10/2026)** Russia, China and other countries have exploited the Internet to wage campaigns of disinformation and interference in Europe to disrupt democratic processes for their perceived political and economic benefit. Since its invasion of Ukraine, Russia has greatly increased its cyber attacks and disinformation campaigns against Ukraine and other countries in Europe. The EU understands the urgency of combatting such attacks against our infrastructures, economies, values and democracies. ATHENA will contribute to Europe’s defence against foreign information manipulation and interference (FIMI). It will examine at least 30 manifestations of FIMI in case studies, including the tactics, techniques and procedures (TTP) used by attackers. The consortium will analyse the behavioural and societal effects of FIMI. It will assess and develop countermeasures against the TTP. It will collect and process FIMI data, develop a knowledge graph, a disinformation analysis toolbox and dashboard showing the prevalence of FIMI and the countermeasures in action. ATHENA will conduct a comparative, eight-country analysis of legal and regulatory frameworks against FIMI and their shortcomings and where Member States and the EU should strengthen their policy framework. ATHENA will produce an easy-to-use questionnaire that anyone can use to decide whether they are confronted by FIMI. We will go beyond state of the art by scanning the horizon for new instances of FIMI, for signs of the evolution in disinformation (as with deepfakes and chatbots). From the start of the project, ATHENA will engage stakeholders through interviews, workshops, a Stakeholder Board and a cluster of relevant projects. We will share knowledge with other stakeholders and provide training in countermeasures to universities and schools. The ATHENA consortium comprises experienced partners, including SMEs, universities, cybersecurity companies, fact-checkers and an association, from Ukraine to Ireland, from Sweden to Cyprus. **Task Leader. Budget: 3.2 Million EUR – UCY: 260,000 EUR.**

- HOLOCIM : A Virtualized Holographic Cloud Ising Machine, CODEVELOP-ICT-HEALTH/0322/0047 (2/2023-1/2025).** HoloCIM is a holography based photonic Ising Machine that utilizes and enhances newly established holographic and nonlinear photonics principles for the efficient solution of combinatorial optimization problems (COPs). The main features of the HoloCIM are: i) the augmentation and enhancement of the capabilities of a Spatial Holographic Ising Machine to be able to solve combinatorial optimization problems (COPs), ii) a number of nodes comparable to the current scientific state of the art ( $N=8*104$ ), iii) incorporate faster holographic devices based on digital micromirror devices (DMD) and GPU processor that can in principle reduce, the current system's processing time by more than two orders of magnitude and finally iv) to implement a dedicated cloud interface for the commercial and scientific exploitation of the system's baseline capabilities, v) expand the device's capabilities to accommodate, plug-in additional nonlinear optical elements, enabling higher order spin-spin interactions. **Budget: 600,000 EUR – UCY: 290,000 EUR.**
- AdaptoFlow. TrialsNet Horizon Europe - Horizon-JU-SNS-2022 Research and Innovation Programme under Grant Agreement No. 101095871 (6/2024-12/2025):** AdaptoFlow is an end-to-end monitoring framework with ML/AI inference capabilities that adapts its execution at runtime taking into account the evolution of the IoT generated data, the state of the underlying edge compute resources, and a set of predefined user preferences. Based on the later inputs, AdaptoFlow decides: (i) when the data dissemination and ML/AI inference should be performed, (ii) where the ML tasks will run, or in other words, which node is the most appropriate to perform the respective ML inference task, and (iii) which is the most appropriate pre-trained model that the system will execute to meet the user's preferences. The design of our framework is interoperable and extensible allowing encapsulation AI/ML models from repositories like hugging face or frameworks, like DeepStream, as containerized services. The latter allows users to have almost zero extra adoption effort of AdaptoFlow framework. To test the vertical service ML/AI placement functionality of our system, we will introduce a new UE device with enhanced processing capabilities. AdaptoFlow UE device consists of four components: (i) a single board computer, specifically Raspberry Pi 4, (ii) an integrated camera on it, (iii) a 5G kit (SIM8200EA-M2 5G HAT) for seamless communication with 5G core networks, and (iv) a Coral TPU integrated on top. Moreover, for the evaluation of AdaptoFlow at scale, we will utilize a scalable edge computing emulation framework in order to replicate the network effects and computational constraints of the real-world environment, as well as extracting the overall benefits from our improvements in contrast with the original execution models. Our final goal is to improve a set of the performance metrics (KPIs) like network traffic, latency, energy consumption, carbon emission, cost, etc., of the UC1/UC4 by sacrificing only a small portion of the monitoring and alerting accuracy. **Budget: 200K EUR UCY: 106K EUR.**
- GreenAnalyzer – aerOS Horizon Europe HE-CL4-2021-DATA-01-05 (6/2024-8/2025):** GreenAnalyzer, an analytical framework that utilizes pre-trained models for the prediction of energy consumption, per process, server, rack, etc., based on workload utilisation characteristics, and energy production models from renewable sources, especially PVs, located near to the Edge micro-DC. For the pre-train models, GreenAnalyzer will provide an automated process for energy consumption model generation by performing pre-deployment benchmarking and training, employing hyper-parameter tuning of composable ML/AI models for every sub-component, e.g., CPU, memory, network, GPU, etc., of different server/device types of Edge micro-DC. Furthermore, GreenAnalyzer will enrich in real-time the generated data with carbon emission and energy consumption costs with its integrated data to be captured from publicly available APIs. **UCY Budget: 60K EUR**
- PowerStorm – Energy-Aware Streaming Analytics Job Scheduling for 5G/6G Deployments. 6G Sandbox Horizon Europe HORIZON-JU-SNS-2022-STREAM-C-01-01 (6/2024 – 5/2025).** The main goal of this project is to demonstrate the effectiveness of our scheduler by conducting a set of experiments on 6G-SANDBOX infrastructures. Specifically, we plan to utilize multiple streaming benchmarks, including Yahoo streaming benchmark, on Berlin's testbed enriching it with a set of 5G-enabled IoT physical devices. The results of our experimentation would be beneficial for our research but also will highlight new opportunities

for energy-aware analytic job scheduling on 5G infrastructures which should consist of multiple edge devices characterized by diverse resource capacities, network conditions, and energy limitations. In our experimental studies, we will showcase PowerStorm's performance in comparison to Apache Storm's default scheduler and R-Storm, which is the most widely used open-source resource-aware scheduler for Storm. **UCY Budget: 30K EUR.**

- **RAIS: Real-time Analytics for the Internet of Sports - H2020-MSCA-ITN-2018 - ETN.** The main objective of RAIS is to provide world class training for a next generation of researchers, computer scientists, and data engineers, emphasizing a strong combination of advanced understanding in both theoretical and experimental approaches, methodologies and tools that are required to develop decentralized, scalable, and secure collective sensing infrastructures and platforms. RAIS training network will fund 14 phd students, 3 workshops, 1 Hackathon event, 1 entrepreneurship event, 3 summer schools and a final Conference. To meet this goal, RAIS will focus on developing new technologies on Big Data Analytics on the Edge, Data Stream Processing, Distributed and Decentralized Machine Learning, Blockchain as well as Security/Privacy. These topics include important and timely research challenges with an immediate exploitation potential. **Training Coordinator. Budget: 3.6 Million EUR – UCY: 707,500 EUR.**
- **UNICORN - A Novel Framework For Multi-Cloud Services Development, Orchestration, Deployment And Continuous Management Fostering Cloud Technologies Uptake From Digital SMEs/Startups, Horizon 2020 Project, EU (1/1/2017-31/12/2020).** This project aims to simplify the design, deployment and management of secure and elastic –by design-multi-cloud services. This will be achieved by a) development and design libraries that will provide security enforcement mechanisms, data privacy restrictions, monitoring metric collection and resource management; b) enabling continuous orchestration and automatic optimization of portable and dynamic cloud services running on virtual instances or micro-execution containers for increased security, data protection privacy and vast resource (de)-allocation. **Scientific manager. Budget: 4.1 Million EUR – UCY: 675,000 EUR.**
- **ICARUS - Aviation -driven Data Value Chain for Diversified Global and Local Operations Grand: EU-H2020 (01/01/2018-31/12/2020)** Current Projects ICARUS - Aviation-driven Data Value Chain for Diversified Global and Local Operations ICARUS aims to build a novel data value chain in the aviation-related sectors towards data-driven innovation and collaboration across currently diversified and fragmented industry players, acting as multiplier of the “combined” data value that can be accrued, shared and traded, and rejuvenating the existing, increasingly non-linear models / processes in aviation. Using methods such as big data analytics, deep learning, semantic data enrichment, and blockchain powered data sharing, ICARUS will address critical barriers for the adoption of Big Data in the aviation industry (e.g. data fragmentation, data provenance, data licensing and ownership, data veracity), and will enable aviation-related big data scenarios for EU-based companies, organizations and scientists, through a multi-sided platform that will allow exploration, curation, integration and deep analysis of original, synthesized and derivative data characterized by different velocity, variety and volume in a trusted and fair manner. ICARUS will bring together the Aerospace, Tourism, Health, Security, Transport, Retail, Weather, and Public sectors and accelerate their data-driven collaboration under the prism of a novel aviation-driven data value chain. Representative use cases of the overall domain’s value chain include: (I) Sophisticated passenger handling mechanisms and personalised services on ground facilities, (II) Enhanced routes analysis of aircrafts for improved fuel consumption optimisation and pollution awareness, (III) More accurate and realistic prediction model of epidemics, (IV) Novel Passenger experiences pre-in- and post-flight. **Scientific coordinator. Budget: 3,951,125 EUR – UCY: 278,750 EUR.**
- **ENEDI - Energy Saving in Public Academic Buildings with Data Centers.** EU-INTERREG (01/12/2017-30/11/2019) ENEDI is funded by the cooperation programme Interreg V-A

Greece-Cyprus which aims to increase the competitiveness of the eligible area by supporting entrepreneurship and the use of information and communication technologies. The programme aims to integrate all issues relating to the environment, either in terms of protection against risks or in terms of promotion of the natural and cultural heritage. The University of Cyprus together with the Greek Research and Technology Network (GRNET) and the University of Crete have joined forces to develop and apply innovative and smart energy management systems for Data Centers, connected with photovoltaic systems, based on dynamic energy efficiency policies and resource utilization and availability. A reduction in data centers' energy consumption is suggested to be made dynamically by concentrating VMs (Virtual Machines) on fewer servers and if possible, shutting them down. Also other scenarios under consideration include the migration of VMs and Containers amongst Greece's and Cyprus' data centers. **UCY Budget: 332,200 EURO Total Budget: 1,014,785 EUR**

- **Check-it - visualising fake news on social media (Google DNI)** The system submits news stories to several fact-checking tools, including fact-checking sites and lists of known fake news sources – scoring them on whether they're real or fake. Social media users will be able to see if what they're reading is fake and, hopefully, they'll think twice about sharing news stories which are known to be untrue. **Budget: 50,000 EUR.**
- **PERSONAS - Situational Awareness, Control and Security Policies Enforcement on Multiple Virtualization Personas of Personal Devices (Research in Enterprises, Research Promotion Foundation, Oct 2018 - Sep. 2020).** Within PERSONAS will be developed a system-level framework that leverages virtualization for offering additional security to the end-user. PERSONAS provide a device independent, user-centric and self-adaptive security system, able to cope with the concept of seamless working experience on different devices, in which a user may start a session on a device and location and follow up the process on different devices and locations, without corporate or personal digital asset loss. Main features include: (i) enable automation of software virtualization for protecting different types of corporate and personal data based on an active context, and (ii) assist individual users and organizations manage data security processes and related policies more effectively while maintaining a sufficient level of user awareness and control of any automated decisions made by computing devices. PIs: E. Athanasiopoulos, G. Pallis, **UCY Budget: 63K EURO Total Budget: 200K EUR.**
- **ARRANGE-ICT (Erasmus+)** is focused on identifying and recording megatrends developments as raised from market innovators in order to help Higher Education Institutes (HEIs) follow the rapid pace of emerging industries. The major priority of ARRANGE-ICT is to enhance the quality and relevance of students' knowledge and skills, as the project aims to support Higher Education Institutes (HEIs) to a) identify urgent technological challenges and needs of high-qualified personnel b) train high-qualified students in ICT specific topics based on the skills required in labour market c) to promote open links between Universities and industry, enhancing the relevance of higher education by supporting new ICT-based internship programs, common PhD student supervision between HEIs and industry and common Bachelor and Master theses supervision in SMEs, market and industry premises. **Budget: 202K EUR – UCY: 34,100 EUR.**
- **Internet of Sports Testbed - Complementary Funding, RPF PI: G. Pallis. Budget: 35,375 EUR.** (03/2019-12/2021)
- **ICARUS dashboard - Complementary Funding, RPF PI: G. Pallis. Budget: 13,937 EUR.** (04/2018-12/2020)
- **Mandola – MANDOLA, Monitoring and Detecting OnLine Hate Speech DG-JUSTICE, EU (1/10/2015-30/9/2017).** This project wants to make a bold step towards improving our



understanding of the prevalence and spread of on-line hate speech and towards empowering ordinary citizens to monitor and report hate speech. **Technical coordinator. Budget: 1 Million EUR – UCY: 150,000 EUR.**

- **CELAR - Automatic, multi-grained elasticity-provisioning for the Cloud. FP7 Project, EU (10/2012-9/2015).** The aim of this project is to develop methods and tools for applying and controlling multi-grained, elastic resource provisioning for Cloud applications in an automated manner. **WP leader.** Budget: 3.5 Million EUR – UCY: 590,000 EUR. CELAR FP7 – **Impact: Selected as Key innovator by EC Innovation Radar Platform.**
- **iSocial – Decentralized Social Networks, Marie Curie ITN Project, FP7, EU(10/2012-9/2016).** The aim of this project is to provide world class training for a next generation of researchers, computer scientists, and Web engineers, emphasizing on a strong combination of advanced understanding in both theoretical and experimental approaches, methodologies and tools that are required to develop Decentralized Online Social Networking platforms. Budget: 3.7 Million EUR – UCY: 650,000 EUR.
- **PaaSport – A Semantically-enhanced Marketplace of interoperable Platform-as-a-service Offerings for the deployment and migration of business applications of European software SMEs. FP7-SME-2012.** The aim of this project is to combine Cloud PaaS technologies with lightweight semantics in order to specify and deliver a thin, non-intrusive Cloud-broker (in the form of a Cloud PaaS Marketplace), to implement the enabling tools and technologies, and to deploy fully operational prototypes and large-scale demonstrators. **Technical Coordinator.** Budget: 2.1 Million EUR – UCY: 280,000 EUR.
- **Cloud Application Management Framework (CAMF) Eclipse Project.** The project aims to develop and sustain the necessary tooling that will assist Cloud application lifecycle management operations, using open standards and languages, where appropriate. As aforementioned, these operations are classified into three distinct categories: (1) application description, (2) application deployment and (3) application monitoring. CAMF follows the Eclipse OSGi plug-in based software architecture for each of the aforementioned operations and inherits the same look-and-feel that Eclipse users are accustomed to. To guarantee the quality of the resulting product, the project follows designated development cycles with rigorous code reviews, unit tests and release cycles. CAMF has been selected to receive an AWS in Education Research grant for the next two years.
- **Nephele Cloud Computing Infrastructure, Startup funding, UCY.** The aim of this project is to acquire advanced technological infrastructure in order to advance high quality research and education in the area of cloud computing. Budget: 85,000 EUR.
- **MOVE, Knowledge Discovery from Moving Objects, COST ACTION IC0903, EU.** The aim of this project is to develop improved methods for knowledge extraction from massive amounts of data about moving objects. Management Committee Member (11/2009 to 10/2013)
- **e-Tracer: An Innovative Object Tracking and Tracing Platform.** PI: G. Pallis (Substitute A. Andreou) (1/2010-6/2011). Research Promotion Foundation. Budget: 39,400 EURO.

#### **Participant**

- **MAI4CAREU: Masters in AI for Careers in EU, 2020-EU-IA-0087, co-financed by the EU CEF Telecom under GA nr. INEA/CEF/ICT/A2020/2267423 (1/6/2021 – 31/5/2024).** The provision of AI knowledge and skills that respond to the huge demand of today's AI industry has been identified as a critical need in the European Union strategic vision to become a world leader in AI. The Action brings together four European universities, a Research Centre and four high tech SMEs that collectively aim to contribute towards this need, capitalizing on

their complementary knowledge and skills. At least 10 new course modules, totalling at least 90 ECTS credits, are to be developed with state-of-the-art content and case studies, where all partners will be contributing including the SMEs. These new modules will be made available online. When steady state is reached, approximately 30-35 students in total will be graduating from the partner universities each year with a Masters' degree in the given programmes. Thus, for the duration of the Action, about 70 students in total would be admitted, in two cohorts, and at least 85% will graduate (the graduates from the first cohort will be in December 2023 and for the second cohort in December 2024). The counselling and career advising of students would be a high priority aiming to assist all graduates to successfully pursue a career related to AI, possibly establishing their own start-ups. (Budget: 887,772 EUR, UCY Budget: 236K EUR)

- **CTIP: Cyber Threat Intelligence Platform (12/2021-11/2023)m** Development a platform that will scan the Internet (IPv4/IPv6) that can be accessed by the National CSIRT-CY. Funded by National CSIRT-CY (UCY budget 335 K EUR)

### **Keynote Speaker at International Conferences**

- "Data Stream Processing at the Edge" Keynote Speaker at 2023 IEEE Global Reliability & Prognostics and Health Management (GlobalRel&PHM) Conference will be held in HangZhou, China from October 12-15, 2023
- "Data Stream Processing at the Edge" Keynote Speaker at 10th European Conference On Service-Oriented And Cloud Computing, 24 – 25 October, 2023, Larnaca, Cyprus

### **Public Lectures/Participation in Panels**

- Fogify: A Fog Computing Emulation Framework, at CYENS research center, 13 May 2023
- Participation in the panel of BDVA Forum 2022 22-11-2022 24-11-2022
- Participation in the panel in IEEE/ACM CCGrid 2019 Conference: "New Generation Cloud Computing: Challenges and Future Directions" Panel Chair: Dr. Rajkumar Buyya, Members: Dr. Carlos Varela, Dr. Yogesh Simmhan, Prof. Dhabaleswar Panda, Dr. George Pallis
- Query-driven Descriptive Analytics for IoT and Edge Computing. Data Management Day, 19th June, 2019, University of Cyprus.
- Future Internet Computing Innovations, Drexel University/IEEE Internet Computing Reception, Washington DC, March 2019
- Check-it - Fake News Detection with Machine Learning and Social Network Analysis, University of Nicosia, February 2019
- Privacy in the Internet Era Technological Context and Emerging Threats, PROBLEM BASED TRAINING ON THE DATA PROTECTION REFORM PACKAGE IN GR AND CY (TRAIN GR-CY), European Commission – Rights Equality and Citizenship Programme, February 2019.
- Monitoring Elastically Adaptive Cloud Services, COST Action IC1304, 2014
- Monitoring and Detecting Online Hate Speech from Twitter, University of Nicosia, 2017
- Trustworthy Cloud Computing – University of Cyprus, 2016
- AdaM: an Adaptive Monitoring Framework for Sampling and Filtering on IoT Devices, University of Nicosia, 2016
- Mining Large-scale Information Network Data: Challenges and Applications, University of Cyprus, 2013
- The Dynamics of Vehicular Networks in Large-Scale Urban Environments, WiNeMO Summer School, 2012

## Students Supervision

### Current PhD Students

- Joanna Gergiou “Benchmarking for Edge Micro-DCs”
- Zacharias Georgiou “Query-Driven Streaming Analytics of IoT Applications across the Cloud,Fog and Edge Continuum”
- George Ioannou (with Christos Nicolaidis) “Data analytics to large-scale empirical data for identifying social influences and promoting well-being”
- Charalambos Lambri “Data Analytics”
- Demosthenis Stefanidis, Sentiment Analysis for Entrepreneurs

### Current PostDocs

- Moysis Symeonides

### Current Master students

- Maysam Khatib, GreenAnalyzer, an analytical framework that utilizes pre-trained models for the prediction of energy consumption (2024)

### Ph.D. Graduates

- Moysis Symeonides (December 2022) with Marios Dikaiakos) Topic: Emulating Data-intensive IoT Applications across the Edge Continuum (Current position: Senior Researcher at LINC, UCY)
- Andreas Papadopoulos (June 2017) Topic: Data Management in the Cloud. (Current position: R&D at CS Circles Solutions)
- Demetris Trihinas (December 2017) (with Marios Dikaiakos) Topic: Adaptive Monitoring Dissemination for the Internet of Things (Current position: Assistant Professor at Computer Science Dpt, University of Nicosia)
- H. Efstathiadis (December 2015) (with Marios Dikaiakos) Topic: Online Social Network Analysis: Extracting Insights and Evolution Trends. (Current position: Group Head of Information Technology at Medochemie Ltd, in charge of the technology department and digital transformation strategy)

### Master Graduates

- George Prokopiou, Data analytics on Glassdoor Reviews (2024) (Current position: Data Scientist in Catalink Ltd)
- Nikolas Petrou, A Multiple change-point detection framework on linguistic characteristics of real versus fake news articles (2023) (Current position: Data Scientist in Catalink Ltd)
- Christodoulou Chrysovalantis, Fake news detection, 2021 (Current position: Playtech)
- Moullos Georgios, 11pets Data Analytics 2020 (Current position: 11pets)
- Ioannou Andreas, IoT Workload Generator, 2020
- Georgiou Zacharias, StreamSight: A Query-driven Framework for Streaming Analytics in Edge Computing, 2020 (Current position: Senior DevOps Engineer at Jinius and Phd student)
- Demosthenis Stefanidis, Sentiment Analysis for Entrepreneurs (2018) (Current position: Phd student)
- Demetris Paschalides (co-advised with Marios D. Dikaiakos), Hate Speech Detection in Social media (2018)
- Demetris Trihinas (co-advised with Marios D. Dikaiakos) Monitoring Elastically Adaptive Applications in the Cloud. 1/2013-12/2013.

- Athanasios Foudoulis, Cloud Application Management Framework. (Current position: Software Development Consultant at Nielsen)

#### **Alumni Post-doctoral Associates**

- Alexandros Karikasidis (Ph.D. Hellenic Open University)
- Demetris Antoniadis (Ph.D. University of Crete)
- Despina Stasi (Ph.D. University of Illinois at Chicago)

#### **Bachelor Graduates (in alphabetical order)**

- Alexandrou Giannis –Event Detection in Social Media
- Andreou Iakovos - Sentiment Analysis in Social Media
- Andreou Rafael - Fake news Detection - network structure perspective
- Andreou Panayiotis, - A carpooling application for mobile devices
- Charalambous Charalambos - Analysis of tags for Software Resources at Google Code
- Chorat George – Sports Analytics
- Christodoulou Andreas - Sentiment Analysis in Social Media
- Christodoulou George - Content Distribution Networks
- Christodoulou Chrysovalantis - Fake news Detection - NLP perspective
- Christoforou Stefanos - Smart home application
- Christou Panicos – Fog emulation
- Demou Panagiota - Impact of Social Network on Content Delivery Networks
- Dimitriou Theodoros - Improving Content Delivery by Exploiting the Utility of CDN Servers
- Georgiou Georgios – Data Analytics for Detecting Emotions
- Georgiou Giagkos - Online Social Networks
- Georgiou Zacharias - Content Distribution Networks
- Georgiou Konstantinos – Polarity Detection
- Demetriou Nikos - Experimental analysis of Content Delivery Networks using CDNsim
- Efstathiadis Hariton - Android Middleware for Urban Sensing
- Evgeniou Pavlos - Microservices development
- Fesas Christos – Edge Computing
- Fragkeskos Kyriakos - Urban sensing application
- Hrodotu Stylianos – Polarity in Social Media
- Iakovou Andreas - Mobile Application
- Kalaitzis Ilias – Application in Drones
- Kaprou Aimilia - Information System for the Cyprus Council for the Recognition of Higher Education
- Katsiolas Daniel Odysseas - Polarization on News Media
- Liotatis Panayiotis - Polarization on News Media
- Litsis Kristina - Recommendation Service for the aviation industry
- Loizou Antonia - Developing an Interactive Web Application with Real-Time Updates
- Mixail Agias Hamti - Cloud Monitoring
- Moleskis George - Cloud Elasticity
- Odysseos Nikos -A Web Information System for a Retail Shop
- Onoufriou Onisiforos - Automated Tagging for the Retrieval of Software Resources in Grid and Cloud Infrastructures
- Outeva Simona Ivanova - Investigate emotions
- Pari Kassiani - Online Social Networks
- Papadimos Charalambos – Detect Fake News/Misinformation
- Papaioanou George - Urban sensing application using the FTW middleware
- Panagiotou Eleni - A Web Information System for a Retail Shop

- Phokas Theophilos - Android Middleware for Urban Sensing
- Pieris Marios - Mobile Application
- Pouis Lucas - Content Distribution Networks
- Poullis Antonis – Sentiment Analysis
- Roussou Phedon Mobile application for Transport Means
- Savvia Antonia - Sentiment Analysis in Social Media
- Siammas Aggelos - Marketplace/blockchains
- Sofianos Petros - Sentiment analysis Greek news
- Sofokleous Ioannis – Fake news detection
- Theodosiou Nikolas - Investigate emotions on Twitter
- Vasileiou Andreas – Applications with Drones
- Vladimirov Marios - Cloud Elasticity
- Vokos Leonidas – Sentiment Analysis in Social Media
- Zavou Elli - Content Distribution Networks

## **Administrative Duties & Service**

### **At the Computer Science Department**

- **Co-Director of the Data Science Master Programme** (2020-present)
- **Member of the management committee for the AI Master Programme** (2021-present)
- **Chair of the Undergraduate Program Committee** (2022 – present)
- **Member of the Publicity's Committee** (2014-present)
- Member of the **Computer Systems and Infrastructures Committee** (2018-2024)
- Member of the **Undergraduate Program Committee** (2013-2021)
- Member of the **organization committee of Logipaignion**.(2014-2021)
- **Coordinator for the Diploma Project** (2016-2020)
- **Coordinator of the allocation of Teaching Assistantships** (2018-2020)
- Chair or **Member of the Evaluation Committee for 10 PhD Theses at Computer Science Department**, University of Cyprus
- Member of the Organization committee of the **2nd and 3rd Workshop of Computer Science for high-school students**

### **At the Faculty of Pure and Applied Sciences**

- **Member of the Committee** for the Computational Science Undergraduate Programme (2019)
- **Member of the Committee** of the Faculty of Pure and Applied Sciences (2014-2016)

### **At the University of Cyprus**

- **Member of the committee** for the development an HPC Data Center (budget: 1M EUR)
- **Member of the committee** for the Academic Personnel Assessment Portal
- **Chair of the committee** for the specifications of the “Internet portal and integration system” for the e-university project, University of Cyprus.
- **Member of the committee** for the evaluation of the “Internet portal and integration system” for the e-university project, University of Cyprus
- **Member of the committee** for the implementation of the “Internet portal and integration system” for the e-university project, University of Cyprus
- **Member of the committee** for the evaluation of a tender offer for mobile devices.

## Publications

### Edited Books, Journal Special Issues and Conference Proceedings

1. G. Pallis: A Grateful Farewell and a Warm Welcome. IEEE Internet Comput. 28(1): 5 2024.
2. D. Zeinalipour, D. Blanco Heras, G. Pallis, H. Herodotou, D. Trihinas, D. Balouek, P. Diehl, T. Cojean, K. Furlinger, M. Hanne Kirkeby, M. Nardelli, P. di Sanzo: Euro-Par 2023: Parallel Processing Workshops - Euro-Par 2023 International Workshops, Limassol, Cyprus, August 28 - September 1, 2023, Revised Selected Papers, Lecture Notes in Computer Science 14351, Springer 2024.
3. W. Shi, G. Pallis, Zhiwei Xu. Edge Computing, IEEE Proceedings Journal, pp. 1474-1481, August 2019.
4. A. Iyengar, A. Kundu, G. Pallis GEI: Healthcare Informatics and Privacy IEEE Internet Computing, Volume 22, Issue 2, March-April 2018
5. D. Alistarh, A. Delis, G. Pallis: Algorithmic Aspects of Cloud Computing - Third International Workshop, ALGO CLOUD 2017, Vienna, Austria, September 5, 2017, Revised Selected Papers. Lecture Notes in Computer Science 10739, Springer 2018, ISBN 978-3-319-74874-0
6. G. Pallis, M. Jmaiel, A. Charfi, S. Graupner, Y. Karabulut, S. Guinea, F. Rosenberg, M. Q. Sheng, C. Pautasso, S. Ben Mokhtar ICSOC 2011 Workshop Proceedings, Springer.
7. D. Katsaros, G. Pallis, S. Sivasubramanian, A. Vakali. IEEE Network, special issue on "**Cloud Computing**" (Jul. 2011)
8. G. Fortino, C. Mastroianni, G. Pallis, M. Pathan, A. Vakali. Computer Networks, special issue on "**Internet-based Content Delivery**", 2011.
9. M. D. Dikaiakos, Dimitrios Katsaros, George Pallis, Athena Vakali, Pankaj Mehra. [IEEE Internet Computing](#) special issue on "**Cloud Computing**" (Sep./Oct. 2009).
10. A. Vakali, G. Pallis: Web Data Management Practices: Emerging Techniques and Technologies. Idea Group Publishing, 2006. [Book Information from publisher's site](#), [Book information from Amazon's site](#).

### Book Chapters (referred)

1. E. Kilanioti, C. Georgiou, G. Pallis: A Study of Scaling Rich Media Content Through Social Network, book chapter in the book "Advanced content delivery and streaming in the cloud", editors: M. Pathan, R. Sitaraman, D. Robinson, Willey 2013.
2. G. Pallis, D. Zeinalipour, M. D. Dikaiakos: [Online Social Networks: Status and Trends](#), book chapter in the book "Web Data Management Trails", editors L. Jain and A. Vakali, Springer, 2011.
3. N. Loulloudes, G. Pallis, M. D. Dikaiakos: [Information Dissemination in Mobile CDNs](#), book chapter in the book "Content Delivery Networks: Principles and Paradigms", editors R. Buyya et. al., Springer, 2008.
4. K. Stamos, G. Pallis, A. Vakali: [Caching techniques on CDN simulated Frameworks](#), book chapter in the book "Content Delivery Networks: Principles and Paradigms", editors R. Buyya et. al., Springer, 2008.
5. Vakali, G. Pallis, L. Angelis : [Clustering Web Information Sources](#), book chapter in the book "Web Data Management Practices: Emerging Techniques and Technologies", editors: A. Vakali, G. Pallis, Idea-Group Publishing, USA, 2006.
6. G. Papadimitriou, A. Vakali, G. Pallis, S. Petridou, A. Pomportsis: [Simulation in Web Data Management](#), book chapter in the book "Applied System Simulation: Methodologies and Applications", editors: M.S. Obaidat and G.I. Papadimitriou, Kluwer Academic Publishers, Norwell, Massachusetts, USA, 2003.

7. G. Pallis, K. Stoupa, A. Vakali: [Storage and Access Control Issues for XML documents](#), book chapter in the book “Web Information Systems”, editors: D. Taniar and W. Rahayu, Idea-Group Publishing, USA, 2003.
8. G. Pallis, K. Stoupa, A. Vakali: Storage and Access Control Policies for XML Documents, book chapter in the book “Encyclopedia of Information Science and Technology, Vol. I-III”, editor: Mehdi Khosrow-Pour, Idea-Group Publishing, USA, 2004.

### **International Journals and Magazines (referred)**

1. N. Petrou, C. Christodoulou, A. Anastasiou, G. Pallis, M. Dikaiakos. A Multiple change-point detection framework on linguistic characteristics of real versus fake news articles, *Scientific Reports (Nature) Journal*, 2023.
2. M. Dikaiakos, N. G. Chatzigeorgiou, A. Tryfonos, A. Andreou, N. Loulloudes, G. Pallis, G. E. Georgiou. A cyber-physical management system for medium-scale solar-powered data centers. *Concurrency and Computation: Practice and Experience*, Wiley, 2023.
3. D. Stefanidis, N. Nicolaou, S. P. Charitonos, G. Pallis, M. Dikaiakos "What's in a face? Facial appearance associated with emergence but not success in entrepreneurship", *The Leadership Quarterly Journal*, Volume , Pages: 101597, 2022.
4. J. Waters, N. Nicolaou, D. Stefanidis, H. Efstathiades, G. Pallis, M. Dikaiakos "Exploring the sentiment of entrepreneurs on Twitter", *PLOS ONE Public Library of Science*, Volume 16, Pages: 1-25, 2021.
5. D. Paschalides, C. Christodoulou, K. Orphanou, R. Andreou, A. Kornilakis, G. Pallis, M. D. Dikaiakos, Ev. P. Markatos: Check-It: A plugin for detecting fake news on the web. *Online Soc. Networks Media* 25: 100156 (2021)
6. J. Georgiou, C. Christodoulou, G. Pallis, M. D. Dikaiakos: The ICARUS Ontology: A General Aviation Ontology. *ERCIM News* 2021(125) (2021)
7. D. Paschalides, D. Stephanidis, A. Andreou, K. Orphanou, G. Pallis, M. D. Dikaiakos, E. P. Markatos: MANDOLA: A Big-Data Processing and Visualization Platform for Monitoring and Detecting Online Hate Speech. *ACM Trans. Internet Techn.* 20(2): 11:1-11:21 (2020)
8. D. Trihinas, George Pallis, Marios D. Dikaiakos: Low-Cost Adaptive Monitoring Techniques for the Internet of Things. *IEEE Trans. Serv. Comput.* 14(2): 487-501 (2021)
9. G. Pallis: The Impact of Internet Computing in the COVID-19 Era. *IEEE Internet Computing*, 24(5): 5-6 (2020)
10. G. Pallis: A new era of Internet Computing is coming. *IEEE Internet Computing*, Jan/Feb, Volume 23, Issue 4, 2019.
11. A. Karakasidis, G. Pallis, M. D. Dikaiakos: Two Hop Privacy Preserving Nearest Friend Searches, *Knowledge and Information Systems (KAIS) Journal*, Springer, Impact Factor: 2.247, 2018.
12. D. Trihinas, A. Tryfonos, M. D. Dikaiakos, G. Pallis DevOps as a Service: Pushing the Boundaries of Micro-Service Adoption. *IEEE Internet Computing*, Volume 22, Issue 3, 2018.
13. A. Papadopoulos, G. Pallis, M. D. Dikaiakos, "Weighted clustering of attributed multi-graphs. *Computing* 99(9): 813-840, 2017
14. D. Trihinas, G. Pallis, M. D. Dikaiakos, "Monitoring Elastically Adaptive Multi-Cloud Services." *IEEE Transactions on Cloud Computing* 2017, DOI: 10.1109/TCC.2015.2511760.
15. C. Snowton, A. Balla, D. Antoniadis, C. Miller, G. Pallis, M. D. Dikaiakos, W. Xing, "A Cost-Effective Approach to Improving Performance of Big Genomic Data Analyses in Clouds. *Future Generation Comp. Syst.* 67: 368-381 (2017).
16. Hariton Efstathiades, Demetris Antoniadis, George Pallis, Marios D. Dikaiakos, Users key locations in online social networks: identification and applications, *Social Network Analysing and Mining*. Springer, Volume 6, Pages: 66:1-66:17, 2016.
17. G. Copil, H.L. Truong, D. Moldovan, S. Dustdar, D. Trihinas, G. Pallis, M. D. Dikaiakos, "Evaluating Cloud Service Elasticity Behavior." *International Journal of Cooperative Information Systems*. Vol. 24, Issue 3, 2015 (30 pages).

18. N. Loulloudes, C. Sofokleous, D. Trihinas, M. D. Dikaiakos, and G. Pallis. "Enabling Interoperable Cloud Application Management through an Open Source Ecosystem." IEEE Internet Computing. Vol. 19, Issue 3, May/June 2015, pp. 54-59.
19. M. D. Dikaiakos, A. Katsifodimos, G. Pallis. [Minersoft: Software Retrieval in Grid and Cloud Computing Infrastructures](#), ACM Transactions on Internet Technology 12(1) ([ACM TOIT](#)), 2012.
20. G. Fortino, C. Mastroianni, G. Pallis, M. Pathan, A. Vakali. [Editorial for special issue Internet-based Content Delivery](#). Computer Networks 55(18): 3987-3990 (2011)
21. D. Katsaros, G. Pallis, S. Sivasubramanian, A. Vakali. [Cloud Computing](#), IEEE Network, 25(4): 4-5 (Jul. 2011)
22. G. Pallis, A. Katsifodimos, M. D. Dikaiakos: [Searching for Software on the EGEE Infrastructure](#). J. Grid Comput. 8(2): 281-304 (2010)
23. G. Pallis: [Cloud Computing: The New Frontier of Internet Computing](#), IEEE Internet Computing, 13(5): 70-73, Sep. 2010.
24. K. Stamos, G. Pallis, A. Vakali, D. Katsaros, A. Sidiropoulos, Y. Manolopoulos: CDNSim: A Simulation Tool for Content Distribution Networks, ACM Trans. Model. Comput. Simul. 20(2) (2010)
25. M. D. Dikaiakos, D. Katsaros, G. Pallis, A. Vakali, P. Mehra: [Cloud Computing: Distributed Internet Computing for IT and Scientific Research](#), IEEE Internet Computing, 12(5), Sep. 2009.
26. D. Katsaros, G. Pallis, K. Stamos, A. Vakali, A. Sidiropoulos, Y. Manolopoulos: [CDNs Content Outsourcing via Generalized Communities](#), IEEE Transactions on Knowledge and Data Engineering, 21(1), 2009.
27. G. Pallis, K. Stamos, C. Thomos, A. Vakali, G. Andreadis: [Integrating Caching Techniques in CDNs using a Classification Approach](#). International Journal of Business Data Communications and Networking (IJBDN), 4(4):1-12, 2008.
28. G. Pallis, A. Vakali, J. Pokorny: [A Clustering-based Approach for Short-term Prefetching on a Web Cache Environment](#), Computers & Electrical Engineering Journal, Elsevier, 34(4): 309-323, 2008.
29. Sidiropoulos, G. Pallis, D. Katsaros, K. Stamos, A. Vakali, Y. Manolopoulos: Prefetching in Content Distribution Networks via Web Communities Identification and Outsourcing, Word Wide Web Journal, 11(1): 39-70, 2008.
30. G. Pallis, L. Angelis, A. Vakali: [Validation and Interpretation of Web Users' Sessions Clusters](#), Information Processing & Management, Elsevier, 43(5): 1348-1367, 2007 (ranked in the top 25 hottest articles for the period April – June 2007).
31. G. Pallis, A. Vakali: [Insight and Perspectives for Content Delivery Networks](#), Communications of the ACM (CACM), Vol. 49, No. 1, pp. 101-106, 2006.
32. A. Vakali, G. Pallis: [Content Delivery Networks: Status and Trends](#), IEEE Internet Computing, Vol. 7, No. 6, pp.68-74, 2003.

#### **Conferences/Workshops (referred)**

1. D. Stefanidis, G. Pallis, M. Dikaiakos, N. Nikolaou. GNN and LLM Insights: Multimodal Cues and Gender Disparities in Video Conversations, accepted at the International AAAI Conference on Web and Social Media (ICWSM 2025).
2. D. Paschalides, G. Pallis, M. Dikaiakos. PARALLAX: Leveraging Polarization Knowledge Graph for Misinformation Detection. The 16th International Conference on Advances in Social Networks Analysis and Mining -ASONAM-2024 ASONAM 2024 University of Calabria, Rende (CS), Calabria, Italy, September 02-05, 2024.
3. G. Ioannou, T. Machiorro, C. Nicolaidis, G. Pallis, E. Markatos. Evaluating the utility of human mobility data under local differential privacy. Proceedings of the 25th IEEE International Conference on Mobile Data Management (MDM), June 24 - June 27, 2024 Brussels, Belgium.
4. S. Koussouris, T. Dalamadas, P. Figueiras, G. Pallis, N. Bountouni, V. Gkolemis, K. Perakis, D. Bibikas, C. Agostinho. Bridging Data and AIOps for Future AI Advancements with Human-



in-the-loop: the AI-DAPT, 30th ICE IEEE/ITMC Conference (ICE 2024) 24 - 28 June 2024, Funchal - Madeira Island.

5. D. Trihinas, M. Symeonides, J. Georgiou, G. Pallis, M. Dikaiakos. "Energy-Aware Streaming Analytics Job Scheduling for Edge Computing", Proceedings of the 14th IEEE International Conference on Cloud Computing TEchnology and Science" (CloudCom '23), 2023, **Best paper award**.
6. M. Symeonides, F. Nikolaidis, D. Trihinas, G. Pallis, M. Dikaiakos, "FedBed: Benchmarking Federated Learning over Virtualized Edge Testbeds", Angelos Bilas, "Proceedings of the 16th IEEE International Conference on Utility and Cloud Computing" (UCC '23), 2023. **Best paper award (2<sup>nd</sup> place)**.
7. M. Symeonides, D. Trihinas, G. Pallis, M. Dikaiakos, "SparkEdgeEmu: An Emulation Framework for Edge-Enabled Apache Spark Deployments", "Proceedings of the 29th International European Conference on Parallel and Distributed Computing" (EuroPar '23), 2023.
8. M. Kasioulis, M. Symeonides, G. Pallis, M. D. Dikaiakos: Power Estimation Models for Edge Computing Devices. Euro-Par Workshops (1) 2023: 257-269
9. M. Symeonides, D. Trihinas, G. Pallis, M.D Dikaiakos, C. Psomas, and I. Krikidis. 5G-Slicer: An emulator for mobile IoT applications deployed over 5G network slices. In Proceedings of the 7th ACM/IEEE Conference on Internet of Things Design and Implementation, of IoTDI 2022, 2022. **Best Paper award**.
10. J. Georgiou, M. Symeonides, M. Kassioulis, D. Trihinas, G. Pallis, M. Dikaiakos. BenchPilot: Repeatable & Reproducible Benchmarking for Edge Micro-DCs. In Proceedings of the 27th IEEE Symposium on Computers and Communications, of ISCC 2022, 2022. **Best Student Paper award**.
11. D. Paschalides, G. Pallis, M. D. Dikaiakos: POLAR: a holistic framework for the modelling of polarization and identification of polarizing topics in news media. International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2021), Virtual Event, The Netherlands, pp. : 348-355. November 8 - 11, 2021.
12. D. Paschalides, C. Christodoulou, K. Orphanou, R. Andreou, A. Kornilakis, G. Pallis, M. D. Dikaiakos, E. P. Markatos: Check-It: A plugin for detecting fake news on the web. Online Soc. Networks Media Journal 25: 100156 (2021)
13. L. Giaretta, I. Savvidis, T. Marchioro, S. Girdzijauskas, G. Pallis, M. D. Dikaiakos, Evangelos P. Markatos: PDS2: A user-centered decentralized marketplace for privacy preserving data processing. 37th IEEE International Conference on Data Engineering Workshops, ICDE Workshops 2021, pp. 92-99, Chania, Greece, April 19-22, 2021.
14. Z. Georgiou, C. Georgiou, G. Pallis, E. M. Schiller, D. Trihinas. A Self-stabilizing Control Plane for the Edge. "Proceedings of the 13th IEEE/ACM International Conference on Utility and Cloud Computing" (IEEE/ACM UCC '20), 2020.
15. M. Symeonides, Z. Georgiou, D. Trihinas, G. Pallis and M. D. Dikaiakos. "Fogify: A Fog Computing Emulation Framework" accepted for publication at the Fifth ACM/IEEE Symposium on Edge Computing (SEC '20).
16. D. Stefanidis, C. Christodoulou, M. Symeonidis, G. Pallis, M. D. Dikaiakos, L. Pouis, K. Orphanou, F. Lampathaki, D. Alexandrou: The ICARUS Ontology: A general aviation ontology developed using a multi-layer approach. The 10th International Conference on Web Intelligence, Mining and Semantics, WIMS 2020: 21-32, Biarritz, France, June 30 - July 3, 2020.
17. M. Symeonides, D. Trihinas, Z. Georgiou, G. Pallis and M. D. Dikaiakos. Query-Driven Descriptive Analytics for IoT and Edge Computing. Proceedings of IEEE IC2E Conference, Prague, Czech Republic, June, 2019.
18. D. Paschalides, A. Kornilakis, C. Christodoulou, R. Andreou, G. Pallis, M. D. Dikaiakos, E. P. Markatos: Check-It: A plugin for Detecting and Reducing the Spread of Fake News and Misinformation on the Web. WI 2019: 298-302

19. A. Tryfonos, A. Andreou, N. Loulloudes, N. Hadjigeorgiou, G. Pallis, M. D. Dikaiakos, G. Georgiou ENEDI: Energy Saving in Datacenters, Proceedings of the 2018 IEEE Global Conference on Internet of Things (2018 IEEE GCIoT), Alexandria, Egypt, December 2018.
20. Z. Georgiou, M. Symeonides, D. Trihinas, G. Pallis and M. D. Dikaiakos. A Query-Driven Framework for Streaming Analytics in Edge Computing, 11th IEEE/ACM International Conference on Utility and Cloud Computing (UCC2018), Zurich, December 2018 (**nominated for the best paper award**)
21. D. Trihinas, L. F. Chiroque, G. Pallis, A. Fernandez Anta, M. Dikaiakos. ATMoN: Adapting the “Temporality” in Large-Scale Dynamic Networks. In Proceedings of 38th IEEE International Conference on Distributed Computing Systems, July 2 – 5, 2018, Vienna, Austria
22. N. Apolonia, S. Antaris, S. Girdzijauskas, G. Pallis, M. Dikaiakos. SELECT: A Distributed Publish/Subscribe Notification System for Online Social Networks Proceedings of the 32nd IEEE International Parallel and Distributed Processing Symposium (IPDPS), Vancouver, British Columbia CANADA, 21-25 May, 2018.
23. D. Trihinas, Z. Georgiou, G. Pallis and M. D. Dikaiakos. Improving Rule-Based Elasticity Control by Adapting the Sensitivity of the Auto-Scaling Decision Timeframe, "Third International Workshop on Algorithmic Aspects of Cloud Computing (ALGO CLOUD 2017), in conjunction with the ALGO 2017 Conference (ALGO 2017 Conference), Vienna, Austria, 2017
24. D. Trihinas, G. Pallis, M. D. Dikaiakos, "ADMin: Adaptive Monitoring Dissemination for the Internet of Things." IEEE INFOCOM 2017.
25. H. Efstathiades, D. Antoniadis, M. D. Dikaiakos, G. Pallis, Z. Szlávik and R.-J. Sips, "Online Social Network Evolution: Revisiting the Twitter Graph." In Proceedings of the 2016 IEEE International Conference on Big Data (IEEE BigData 2016), IEEE Computer Society, December 2016 (best student paper award).
26. H. Efstathiades, D. Antoniadis, G. Pallis, and M. D. Dikaiakos, Distributed Large-Scale Data Collection in Online Social Networks. In Proceedings of 2nd IEEE International Conference on Collaboration and Internet Computing, Pittsburgh, USA, November 2016 (invited).
27. D. Trihinas, G. Pallis, M.D Dikaiakos, “AdaM: An Adaptive Monitoring Framework for Sampling and Filtering on IoT Devices.” In Proceedings of the 2015 IEEE International Conference on Big Data (IEEE BigData 2015), October, Santa Clara, USA, 2015, pp. 717-726.
28. S. Antaris, D. Stasi, M. Höglqvist, G. Pallis, M. D. Dikaiakos. “A Socio-Aware Decentralized Topology Construction Protocol.” In Proceedings of the IEEE Workshop on Hot Topics in Web Systems and Technologies (HotWeb 2015), Washington, USA, November 12-13, 2015.
29. N. Loulloudes, G. Pallis, M. D. Dikaiakos, "The Dynamics of Vehicular Networks in Large-Scale Urban Environments." In Proceedings of 1st IEEE International Conference on Collaboration and Internet Computing, Hangzhou, China, October 27-30 2015 (invited).
30. H. Efstathiades, D. Antoniadis, G. Pallis, and M. D. Dikaiakos, "Identification of Key Locations based on Online Social Network Activity." Proceedings of the 2015 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining - ASONAM 2015. Paris, France, August 25-28, 2015.
31. A. Papadopoulos, D. Rafailidis, G. Pallis, and M. D. Dikaiakos, “Clustering Attributed Multigraphs with Information Ranking.” In Database and Expert Systems Applications - 26th International Conference, (DEXA 2015), Valencia, Spain, September 1 - 4, 2015. Lecture Notes in Computer Science, Vol. 9261, Springer 2015, pp 432-446.
32. C. Smowton, C. Miller, W. Xing, A. Bala, D. Antoniadis, M. D. Dikaiakos. "Analysing Cancer Genomics in the Elastic Cloud." Proceedings of the Workshop on Clusters, Clouds and Grids for Life Sciences. In conjunction with CCGrid 2015 - 15th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing. May 4-7, 2015, Shenzhen, Guangdong, China.
33. G. Copil and D. Trihinas and H.L Truong and D. Moldovan and G. Pallis and S. Dustdar and M. D. Dikaiakos. "ADVISE -- a Framework for Evaluating Cloud Service Elasticity Behavior".

- In *Service-Oriented Computing. 12th International Conference, ICSOC 2014, Paris, France, November 3-6, 2014*, Lecture Notes in Computer Science, Vol. 8831, Springer, 2014, pp. 275-290 (best paper award).
34. C. Sofokleous and N. Loulloudes and D. Trihinas and G. Pallis and M. Dikaiakos. "c-Eclipse: An Open-Source Management Framework for Cloud Applications." In *EuroPar 2014 Parallel Processing, The 20th International Conference, Porto, Portugal 2014*, Lecture Notes in Computer Science, Vol. 8632, Springer, 2014, pp. 38-49.
  35. D. Trihinas and G. Pallis and M. D. Dikaiakos. "JCatascopia: Monitoring Elastically Adaptive Applications in the Cloud". In *Proceedings of the 14th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing" (CCGRID 2014)*. Chicago, IL, USA, 27-29 May 2014, pp. 226-235.
  36. A. Papadopoulos, G. Pallis, M. D. Dikaiakos. "Identifying Clusters with Attribute Homogeneity and Similar Connectivity in Information Networks." *The 2013 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology*. Atlanta, GA, USA, November 17-20, IEEE Computer Society 2013, pp. 343 – 350.
  37. N. Loulloudes, G. Pallis, M. D. Dikaiakos. V-Radar: A Vehicular Traffic Query Protocol for Urban Environments. In *Proceedings of Vehicular Traffic Management for Smart Cities (VTM 2012)* workshop, in conjunction with IFIP Wireless Days 2012, IEEE, November 21-23, 2012, Dublin, Ireland.
  38. G. Christodoulou, C. Georgiou, G. Pallis. [The Role of Twitter in YouTube Videos Diffusion](#). In *Proceedings of the 13th International Conference on Web Information System Engineering (WISE 2012)*, Springer LNCS, Paphos, Cyprus, Nov. 2012.
  39. G. Pallis. [Improving Content Delivery by Exploiting the Utility of CDN Servers](#). 5th International Conference on Data Management in Cloud, Grid and P2P Systems, Springer LNCS, Vienna, Austria, Sep. 2012.
  40. Katakis, G. Pallis, M.D. Dikaiakos, O. Onoufriou, "[Automated Tagging for the Retrieval of Software Resources in Grid and Cloud Infrastructures](#)", IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2012), Ottawa, Canada, May 2012.
  41. E. Spanakis, C. Efstathiades, G. Pallis, M. D. Dikaiakos: [Real-Time Graph Visualization Tool for Vehicular Ad-Hoc Networks](#), 16th IEEE Symposium on Computers and Communications, June 28 - July 1, 2011, Kerkyra (Corfu), Greece.
  42. N. Loulloudes, G. Pallis, M. D. Dikaiakos. [Caching Dynamic Information in Vehicular Ad-Hoc Networks](#). *Proceedings of Euro-Par 2010*, Ischia-Naples, Italy, Sep. 2010.
  43. N. Loulloudes, G. Pallis, M. D. Dikaiakos. [On the Evaluation of Caching in Vehicular Information Systems](#). *Proceedings of 11th International Conference on Mobile Data Management (MDM 2010)*, Kansas City, Missouri, May 23-26, 2010 (poster).
  44. G. Pallis, A. Katsifodimos, M. D. Dikaiakos. [Effective Keyword Search for Software Resources in Large-scale Network Environments](#). *Proceedings of IEEE/WIC/ACM International Conference on Web Intelligence*, Milano, Italy, Sep. 2009.
  45. G. Pallis, D. Katsaros, M. D. Dikaiakos, N. Loulloudes, L. Tassioulas. [On the Structure and Evolution of Vehicular Networks](#). *Proceedings of 17th Annual Meeting of the IEEE/ACM International Symposium on Modelling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2009)*, London, UK, Sep. 2009.
  46. K. Stamos, G. Pallis, A. Vakali, M. D. Dikaiakos: [Evaluating the Utility of Content Delivery Networks](#). In *Proceedings of the 4th UPGRADE-CN Workshop on Content Management and Delivery in Large-Scale Networks (In conjunction with ACM/IEEE International Symposium on High Performance Distributed Computing (HPDC'09))*, ACM Press, Jun. 2009, Munich, Germany.
  47. A. Katsifodimos, G. Pallis, M. D. Dikaiakos: [Harvesting Large-Scale Grids for Software Resources](#). In *Proceedings of the 9th IEEE International Symposium on Cluster Computing and the Grid (CCGrid 2009)*, Shanghai, China, May 2009.

48. G. Pallis, C. Thomos, K. Stamos, A. Vakali, G. Andreadis: [Content Classification for Caching under CDNs](#). In Proceedings of the 4th International IEEE Innovations of Information Technology Conference, Dubai, UAE, Nov. 2007.
49. K. Stamos, G. Pallis, C. Thomos, A. Vakali: [A similarity-based Approach for Integrated Web Caching and Content Replication in CDNs](#). In Proceedings of 10th International Database Engineering and Applications Symposium (IDEAS 2006), IEEE Press, New Delhi, India, Dec. 2006.
50. K. Stamos, G. Pallis, A. Vakali: [Integrating Caching Techniques on a Content Distribution Network](#). In Proceedings of 10th East-European Conference on Advances in Databases and Information Systems (ADBIS 2006), Springer-Verlag, Thessaloniki, Greece, Sep. 2006.
51. G. Pallis, K. Stamos, A. Vakali, D. Katsaros, A. Sidiropoulos, Y. Manolopoulos: [Replication based on Objects Load under a Content Distribution Network](#), In Proceedings of the 2nd International Workshop on Challenges in Web Information Retrieval and Integration (WIRI) (In conjunction with ICDE'06), Atlanta, Georgia, USA, Apr. 2006.
52. G. Pallis, A. Vakali, K. Stamos, A. Sidiropoulos, D. Katsaros, Y. Manolopoulos: [A Latency-based Object Placement Approach in Content Distribution Networks](#), In Proceedings of the 3rd Latin American Web Congress (La-Web 2005), IEEE Press, Buenos Aires, Argentina, Oct. 2005.
53. G. Pallis, L. Angelis, A. Vakali: [Model-based Cluster Analysis for Web Users Sessions](#). In Proceedings of the 15th International Symposium on Methodologies for Intelligent Systems (ISMIS 2005), Saratoga (NY), USA, May 2005.
54. G. Pallis, A. Vakali, E. Sidiropoulos: [FRES-CAR: An Adaptive Cache Replacement Policy](#). In Proceedings of the 1st IEEE International Workshop on Challenges in Web Information Retrieval and Integration (WIRI'05) in cooperation with the 21st IEEE Conference on Data Engineering ICDE 2005, Tokyo, Japan, Apr. 2005.
55. G. Pallis, L. Angelis, A. Vakali, J. Pokorny: [A Probabilistic Validation Algorithm for Web Users' Clusters](#). Proceedings of the IEEE International Conference on Systems, Man and Cybernetics, Hague, Holland, Oct. 2004.
56. S. Petridou, G. Pallis, A. Vakali, G. Papadimitriou and A. Pomportsis: [Web Data Accessing and the Web Searching Process](#), Proceedings of the ACS/IEEE International Conference on Computer Systems and Applications (AICCSA'03), Tunisia, Jul. 2003.
57. G. Pallis, A. Vakali, L. Angelis and M. S. Hacid: [A Study on Workload Characterization for a Web Proxy Server](#), Proceedings of the 21st IASTED International Multi-Conference on Applied Informatics (AI 2003), Innsbruck, Austria, Feb. 2003.
58. A. Vakali and G. Pallis: [A study on Web Caching Architectures and Performance](#). 5th Multi-Conference on Systemics, Cybernetics and Informatics (SCI 2001), Florida, USA, Jul. 2001.

### **Demonstrations (referred)**

1. M. Symeonides, D. Trihinas, G. Pallis, M. D. Dikaiakos: Demo: Emulating 5G-Ready Mobile IoT Services. Seventh IEEE/ACM International Conference on Internet-of-Things Design and Implementation, IoTDI 2022, pp. 113-114, 2022, Milano, Italy, May 4-6, 2022.
2. M. Symeonides, Z. Georgiou, D. Trihinas, G. Pallis and M. D. Dikaiakos. " Demo: Emulating Geo-Distributed Fog Services" accepted for publication at the Fifth ACM/IEEE Symposium on Edge Computing (SEC '20). **Best demo award**
3. M. Symeonides, D. Trihinas, J. Georgiou, M. Kasioulis, G. Pallis, M. D. Dikaiakos, T. Toliopoulos, A. Michailidou, A. Gounaris: Demo: The RAINBOW Analytics Stack for the Fog Continuum. ISCC 2022
4. D. Antoniadou, N. Loulloudes, A. Foudoulis, C. Sophokleous, D. Trihinas, G. Pallis, M. D. Dikaiakos, H. Kornmayer. "Enabling Cloud Application Portability." In Proceedings of the Cloud Challenge 2015. In conjunction with 8th IEEE/ACM International Conference on Utility and Cloud Computing, December 07-10, 2015, Limassol, Cyprus.

5. D. Trihinas and C. Sofokleous and N. Loulloudes and A. Foudoulis and G. Pallis and M. D. Dikaiakos. "Managing and Monitoring Elastic Cloud Applications [Demo Paper]." In Proceedings of the 14th International Conference on Web Engineering" (ICWE 2014). July 1-4, 2014, Toulouse, France.
6. E. Spanakis, G. Pallis, M. D. Dikaiakos: Graph Visualization Tool for Vehicular Ad-Hoc Networks, IEEE Vehicular Networking Conference 2011 (IEEE VNC 2011), November 14-16, 2011, Amsterdam, The Netherlands.

#### **Short Papers, Posters and Extended Abstracts in Proceedings (referreed)**

1. M. Kasioulis, M. Symeonides, G. Ioannou, G. Pallis and M. Dikaiakos. Energy modeling of inference workloads with AI accelerators at the Edge: A benchmarking study. 12th IEEE International Conference on Cloud Engineering, Paphos, 24-27, Cyprus, Sep. 2024.
2. N. Loulloudes, G. Pallis, M. D. Dikaiakos, "On the Performance Evaluation of VANET Routing Protocols in Large-Scale Urban Environments (poster)." IEEE Vehicular Networking Conference 2012. November 14-16, 2012, Seoul, Korea.
3. N. Loulloudes, G. Pallis, M. D. Dikaiakos. "On the Evaluation of Caching in Vehicular Information Systems." 11th International Conference on Mobile Data Management (MDM 2010), Kansas City, Missouri, May 23-26, 2010, pp. 218-220.

#### **Standards**

1. DIN (German Institute for Standardization) CEN standard for analytics insights and scaling policies for Microservices [https://www.cencenelec.eu/media/CEN-CENELEC/CWAs/RI/cwa17494\\_2020.pdf](https://www.cencenelec.eu/media/CEN-CENELEC/CWAs/RI/cwa17494_2020.pdf) (2020)
2. "A unified and portable cloud application management", DIN SPEC 91337 (released February 2017).

#### **Publications in National Conferences (referreed)**

1. D. Trihinas, Z. Georgiou, G. Pallis and M. D. Dikaiakos. Improving Rule-Based Elasticity Control by Adapting the Sensitivity of the Auto-Scaling Decision Timeframe, 16th Hellenic Data Management Symposium (HDMS18), Larnaca, July 2018.
2. D. Trihinas, G. Pallis, M.D Dikaiakos, "AdaM: An Adaptive Monitoring Framework for Sampling and Filtering on IoT Devices." 14th Hellenic Data Management Symposium (HDMS16), Athens, July 2016.
3. N. Loulloudes, G. Pallis, M. D. Dikaiakos. "Evaluating Caching in VANETs," 9th Hellenic Data Management Symposium (HDMS10), Ayia Napa, June 2010.
4. M. D. Dikaiakos, A. Katsifodimos, G. Pallis, "Minersoft: A Software Search Engine for Large-Scale Grid Infrastructures." 8th Hellenic Data Management Symposium 2009 (HDMS09), Athens, Greece, August 31-September 1, 2009

#### **Other Scientific Publications**

1. Z. Georgiou, C. Georgiou, G. Pallis, E. M. Schiller, D. Trihinas: A Self-stabilizing Control Plane for the Edge and Fog Ecosystems. CoRR abs/2011.02190 (2020)
2. N. Loulloudes, G. Pallis, M. D. Dikaiakos: The Dynamics of Vehicular Networks in Urban Environments (2010) (online edition in arxiv.org).