

Publications

Georgios Keramidas *Adjunct Lecturer*

Total publications: **37**

2022 (8)

- Evanthia Faliagka, Christos Panagiotou, Christos Antonopoulos, Georgios Keramidas, Nikolaos Voros, *A Novel Marketplace Perspective Promoting Customized Low Energy Computing and IoT: The SMART4ALL Approach*, **IEEE Annual Symposium on ISVLSI**, July 4th – 6th, Pafos, Cyprus, 2022
- Tobias Dorr, Florian Schade, Leonard Masing, Jürgen Becker, Georgios Keramidas, Christos P. Antonopoulos, Michail Mavropoulos, Vasilios Kelefouras, Nikolaos Voros, *Safety by Construction: Pattern-Based Application of Safety Mechanisms in XANDAR*, **IEEE Annual Symposium on ISVLSI**, July 4th – 6th, Pafos, Cyprus, 2022
- Fahad Siddiqui, Rafiullah Khan, Sakir Sezer, Kieran McLaughlin, Vahid Garousi, Leonard Masing, Tobias Dorr, Florian Schade, Jürgen Becker, Alexander Ahlbrecht, Wanja Zaeske, Umut Durak, Nico Adler, Andreas Sailer, Raphael Weber, Thomas Wilhelm, Geza Nemeth, Victor Morales, Paco Gomez, Georgios Keramidas, Christos P. Antonopoulos, Michail Mavropoulos, Vasilios Kelefouras, Konstantinos Antonopoulos, Nikolaos Voros, Christos Panagiotou and Dimitris Karadimas, *XANDAR: A holistic Cybersecurity Engineering Process for Safety-critical and Cyber-physical Systems*, **IEEE 95th Vehicular Technology Conference (VTC2022)**, 19th – 22nd June, Helsinki, Finland, 2022
- Evanthia Faliagka, Christos Panagiotou, Konstantinos Antonopoulos, Vasileios Stavropoulos, Dimitris Karadimas, Georgios Keramidas, Christos Antonopoulos, Nikolaos Voros, *An architecture for handling heterogeneous services in a speech and language therapy platform*, **11th Mediterranean Conference on Embedded Computing (MECO)**, June 7th – 10th, Budva, Montenegro, 2022
- Konstantinos Antonopoulos, Dimitrios Ringas, Eleni Christopoulou, Georgios Keramidas, Christos P. Antonopoulos, Nikolaos Voros, *A Network Simulator as a Service for Demanding Performance Evaluation of Wireless and IoT Scenarios*, **IEEE International Mediterranean Conference on Communications and Networking (MeditCom) (IEEE MeditCom 2022)**, Athens, Greece, 2022
- Nikos Petrellis, Christos Antonopoulos, Georgios Keramidas, Nikolaos Voros, *Mobile Plant Disease Classifier, Trained with a Small Number of Images by the End User*, **MDPI Agronomy 2022: Special Issue Machine Vision Systems in Digital Agriculture, Volume 12, Issue 8**, [Link to Article](#), 2022

- V. Kelefouras, K. Djemame, G. Keramidas, N. Voros, *A Methodology for Efficient Tile Size Selection for Affine Loop Kernels*, **International Journal of Parallel Programming**, **50**, 405–432 Springer, [Link to Article](#), 2022
- Konstantinos Antonopoulos, Dimitrios Ringas, Eleni Christopoulou, Georgios Keramidas, Christos Antonopoulos and Nikolaos Voros, *NS3SaaS: Cloud-based Network Simulator as a Service leveraging customisable resource scheduling*, **IEEE International Conference on Cloud Networking**, 7th – 10th November 2022, Paris, France, 2022

2021 (12)

- Nikos Petrellis, Stavros Zogas, Panagiotis Christakos, Georgios Keramidas, Panagiotis Mousouliotis, Nikolaos Voros, Christos Antonopoulos, *High Speed Implementation of the Deformable Shape Tracking Face Alignment Algorithm*, **Euromicro Conference on Digital System Design (DSD)**, September 1st – 3rd 2021, Palermo, Spain, 2021
- Jürgen Becker, Leonard Masing, Tobias Dörr, Florian Schade, Georgios Keramidas, Christos P. Antonopoulos, Michail Mavropoulos, Efstratios Tiganourias, Vasilios Kelefouras, Konstantinos Antonopoulos, Nikolaos Voros, Umut Durak, Alexander Ahlbrecht, Wanja Zaeske, Christos Panagiotou, Dimitris Karadimas, Nico Adler, Andreas Sailer, Raphael Weber, Thomas Wilhelm, Florian Oszwald, Dominik Reinhardt, Mohamad Chamas, Adnan Bekan, Graham Smethurst, Fahad Siddiqui, Rafiullah Khan, Vahid Garousi, Sakir Sezer, Victor Morales, *XANDAR: X-by-Construction Design framework for Engineering Autonomous & Distributed Real-time Embedded Software Systems*, **31st International Conference on Field-Programmable Logic and Applications (FPL)**, August 30th – September 3rd 2021, Dresden, Germany, 2021
- Angelos S. Voros, Christos Panagiotou, Stavros Zogas, Georgios Keramidas, Christos P. Antonopoulos, Michael Hubner, Nikolaos S. Voros, *The SMART4ALL High Performance Computing Infrastructure: Sharing high-end hardware resources via cloud-based microservices*, **31st International Conference on Field-Programmable Logic and Applications (FPL)**, August 30th – September 3rd 2021, Dresden, Germany, 2021
- A. Spournias, E. Faliagka, C. Antonopoulos, G. Keramidas and N. Voros, *Social Distance Monitoring using AI techniques in AAL environments*, **IEEE International Conference on Smart Internet of Things (SmartIoT)**, August 13th – 15th 2021, Jeju Island, South Korea, 2021
- Alexandros Spournias, Panagiotis Bountas, Evanthia Faliagka, Dimitris Kontargiris, Christos Antonopoulos, Georgios Keramidas, Nikolaos S. Voros, *Smart health monitoring using AI techniques in AAL environments*, **10th Mediterranean Conference on Embedded Computing (MECO)**, June 7th – 10th 2021, Budva, Montenegro, 2021
- Panagiotis Mousouliotis, Stavros Zogas, Panagiotis Christakos, Georgios Keramidas, Nikos Petrellis, Christos Antonopoulos, Nikolaos Voros, *Exploiting Vitis Framework for Accelerating Sobel Algorithm*, **10th Mediterranean Conference on Embedded Computing (MECO)**, June 7th – 10th, 2021, Budva, Montenegro, 2021
- Vasilios Kelefouras, Karim Djemame, Georgios Keramidas, and Nikolaos Voros, *An analytical model for loop tiling transformation*, **International Conference on Embedded Computer Systems: Architectures, Modeling, and Simulation (SAMOS 2021)**, July 4 – 8, Samos, Greece, 2021
- K. Antonopoulos, C. Panagiotou, C. Antonopoulos, N. Voros, G. Keramidas, *Characterization of WiFi Modules Using an Open-Source Network Simulator*, **6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media**

Conference (SEEDA-CECNSM), September 24th – 26th 2021, Preveza, Greece, 2021

- S. T. Mavrikis, C. P. Antonopoulos, N. S. Voros and G. Keramidas, *Comparative evaluation of computer vision technologies, targeting object identification and localization scenarios*, **6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM)**, September 24th – 26th, 2021, Preveza, Greece, 2021
- N. Petrellis, P. Christakos, S. Zogas, P. Mousouliotis, G. Keramidas, N. Voros, C. Antonopoulos, *Challenges Towards Hardware Acceleration of the Deformable Shape Tracking Application*, **IEEE VLSI SoC Conference**, October 4th – 8th 2021, Singapore, 2021
- N. Petrellis, S. Zogas, P. Christakos, P. Mousouliotis, G. Keramidas, N. Voros, C. Antonopoulos, *Software Acceleration of the Deformable Shape Tracking Application*, **2nd Symposium on Pattern Recognition and Applications, ACM**, November 19th -21st 2021, Larissa, Greece, 2021
- Safdar Mahmood, Kwame Owusu Ampadu, Konstantinos Antonopoulos, Christos Panagiotou, Sergio Andres Pertuz Mendez, Ariel Podlubne, Christos Antonopoulos, Georgios Keramidas, Michael Hübner, Diana Goehringer and Nikolaos Voros, *Prospects of Robots in Assisted Living Environment*, **Electronics**, **2021**, **10**, **2062**, [Link to Article](#), 2021

2020 (5)

- Christos P. Antonopoulos, Georgios Keramidas, Nikolaos S. Voros, Michael Huebner, Fynn Schwiegelshohn, Diana Goehringer, Maria Dagioglou, Georgios Stavrinos, Stasinou Konstantopoulos, Vangelis Karkaletsis, *Towards an ICT based Service Oriented Health Care Paradigm*, **IEEE Consumer Electronics Magazine**, [Link to Article](#), IEEE, 2020
- Christos P. Antonopoulos, Georgios Keramidas, Vassilis D. Tsakanikas, Evi Faliagka, Christos Panagiotou, Nikolaos Voros, *Capacity Building Among European Stakeholders In the Areas of Cyber-Physical Systems, IoT & Embedded Systems: The SMART4ALL Digital Innovation Hub Perspective*, **IEEE Annual Symposium on ISVLSI**, July 6th – 8th, Limassol, Cyprus, 2020
- Georgios Keramidas, Christos P. Antonopoulos, Nikolaos Voros, Pekka Jääskeläinen, Marisa Catalán Cid, Evangelia I. Zacharaki, Apostolos P. Fournaris, Aris Lalos, *CPSoSaware: Cross-layer Cognitive Optimization Tools & Methods for the Lifecycle Support of Dependable CPSoS*, **IEEE Annual Symposium on ISVLSI**, July 6th – 8th, Limassol, Cyprus, 2020
- Nikolaos Voros, Christos Antonopoulos, Georgios Keramidas, Michael Huebner, Radovan Stojanovic, *SMART4ALL an extensive network of Digital Innovation Hubs for boosting technology and business development in South, Eastern and Central Europe*, **9th Mediterranean Conference on Embedded Computing**, 8th – 11th June, Budva, Montenegro, 2020
- Alexandros Spournias, Georgios Keramidas, Christos Antonopoulos, Nikolaos Voros, Radovan Stojanovic, *Enhancing visual recognition for door status identification in AAL robots via machine learning*, **9th Mediterranean Conference on Embedded Computing**, 8th – 11th June, Budva, Montenegro, 2020

2019 (1)

- Georgios Keramidas, Christos Antonopoulos, Alexandros Spournias, Nikolaos S. Voros, Fynn Schwiegelshohn, Diana Göhringer, Evaggelinos Mariatos, *Optimizing the Operational Time of AAL Robots*, **IEEE Consumer Electronics Magazine**, [Link to Article](#), IEEE, 2019

2018 (3)

- Christos Antonopoulos, Georgios Keramidas, Nikolaos S. Voros, *Robots in assisted living environments as an unobtrusive, efficient, reliable and modular solution for independent ageing: The RADIO Experience*, **14th International Symposium on Applied Reconfigurable Computing**, 712 - 723, May 2nd - 4th, Santorini Island, Greece, 2018
- Nikolaos Voros, Michael Huebner, Georgios Keramidas, Diana Goehringer, Christos Antonopoulos, Pedro C. Diniz, *Applied Reconfigurable Computing: Architectures, Tools, and Applications*, , Springer, 2018
- Georgios Keramidas, Christos Antonopoulos, Nikolaos S. Voros, Fynn Schwiegelshohn, Philipp Wehner, Michael Huebner, Diana Göhringer, Evaggelinos Mariatos, *Accelerating AAL Home Services using Embedded Hardware Components*, **RADIO -- Robots in Assisted Living**, 91 - 112, Springer, 2018

2017 (2)

- Vasilios Kelefouras, Georgios Keramidas, Nikolaos Voros, *Cache partitioning + loop tiling: A methodology for effective shared cache management*, **IEEE Computer Society Annual Symposium on VLSI**, July 3rd - 5th, Bochum, Germany, 2017
- Georgios Keramidas, Nikolaos Voros, Christos Antonopoulos, Fynn Schwiegelshohn, Philipp Wehner, Diana Göhringer, Evaggelinos Mariatos, *Profile-driven Power Optimizations for AAL Robots: Maximizing Robots Idle Time by Offloading Monitoring Workload to Dedicated Hardware Components*, **IEEE Computer Society Annual Symposium on VLSI**, July 3rd -5th, Bochum, Germany, 2017

2016 (4)

- Georgios Keramidas, Christos Antonopoulos, Nikolaos S. Voros, Fynn Schwiegelshohn, Philipp Wehner, Jens Rettkowski, Diana Göhringer, Michael Hübner, Stasinios Konstantopoulos, Theodore Giannakopoulos, Vangelis Karkaletsis and Vaggelis Mariatos, *Computation and Communication Challenges to Deploy Robots in Assisted Living Environments*, **Conference on Design, Automation and Test in Europe (DATE)**, March 14st - 16th, Dresden, Germany, 2016
- Apostolos Fournaris, Georgios Keramidas, Kyriakos Ispoglou and Nikolaos Voros, *VirISA: Recruiting Virtualization and Reconfigurable Processor ISA for Malicious Code Injection Protection*, **Components and Services for IoT Platforms: Paving the Way for IoT Standards**, 119-132, Springer, 2016
- Christos Panagiotou, Christos Antonopoulos, Georgios Keramidas, Nikolaos Voros and Michael Hübner, *IoT in Ambient Assistant Living Environments: A View from Europe*, **Components and Services for IoT Platforms: Paving the Way for IoT Standards**, 281-298, Springer, 2016
- Georgios Keramidas, Nikolaos Voros, Michael Hübner, *Components and Services for IoT Platforms: Paving the Way for IoT Standards*, , Springer, 2016

2015 (2)

- Fynn Schwiegelshohn, Philipp Wehner, Jens Rettkowski, Diana Göhringer, Michael Hübner, Georgios Keramidas, Christos Antonopoulos, Nikolaos S. Voros, *A Holistic Approach for Advancing Robots in Ambient Assisted Living Environments*, **Proceedings of 13th IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC 2015)**, pp. 140 - 147, October 21st – 23th, Porto, Portugal, 2015
- Christos Antonopoulos, Georgios Keramidas, Nikolaos S. Voros, Michael Huebner, Diana Goehringer, Maria Dagioglou, Theodore Giannakopoulos, Stasinios Konstantopoulos, Vangelis Karkaletsis, *Robots in assisted living environments as an unobtrusive, efficient, reliable and modular solution for independent ageing: The RADIO perspective*, **Proceedings of 11th International Symposium on Applied Reconfigurable Computing (ARC 2015)**, April 13th – 17th, Bochum, Germany, Springer LNCS 9040, pp. 535 - 546, 2015