

George Kornaros is an Associate Professor at the Electrical and Computer Engineering Dept. - Hellenic Mediterranean University, [www.hmu.gr](http://www.hmu.gr), (former Technological Educational Institute of Crete), Greece, where he leads the Intelligent Systems and Computer Architecture Group (<https://isca.hmu.gr>).

In the past, Kornaros, appointed at ICS-FORTH, originally worked on semi-custom and full-custom VLSI design, where he contributed initially to the front- and back-end design of Telegraphos-II switch chip and later to the design, characterization and implementation of multi-ported memories RAM and CAM for the ATLAS single-chip switch. In industry, as appointed at ISD SA Kornaros led the Digital Integrated Systems Group doing research and development of network processor architectures. Later, in Ellemedia Technologies Ltd worked in EU and national projects as Technical Manager and co-head Architect in the same domain in designing single-chip high-speed network processors.

As appointed at Electrical and Computer Engineering Department, Hellenic Mediterranean University, currently as Associate Professor, the research activities focused on designing embedded systems for the Point-of-Care device in EU-funded project (Micro2DNA) and developing Lab-on-Chip in a national project (Lab-On-Chip-ATEI-CRETE, Corallia Microelectronics Cluster, MIKPO2-39/E-II-Γ, EPAN-II). His recent research involves multi-core and heterogeneous architectures and particularly hardware support for optimizing embedded and cyber-physical systems with full-virtualization in terms of adaptable and secure processing (EU/FP7 projects VERTICAL, SAVE, TRESCCA, DREAMS, EU/H2020 project TAPPS). The present research focus on IoT devices and communications security for IoT infrastructures in Industry 4.0 (EU/H2020 AVANGARD).

Kornaros professional activities include organization and presentations of a few workshops and tutorial while also serving as a reviewer for various IEEE/ACM journals and conferences. Kornaros has published more than 70 scientific articles in conferences, journals, book chapters and edited the book “MultiCore Embedded Systems”, CRC Press/Taylor & Francis Group.

Kornaros has a diploma in computer engineering and information science from the University of Patras (1992), an MSc in computer science from the University of Crete (1997) and a PhD from the Technical University of Crete (2013). He holds three patents and is a member of the Technical Chamber of Greece.

Most recent journal publications include:

- [1] O. Tomoutzoglou, D. Mbakoyiannis, G. Kornaros and M. Coppola, "Efficient Job Offloading in Heterogeneous Systems through Hardware-assisted Packet-based Dispatching and User-level Runtime Infrastructure", *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, doi: 10.1109/TCAD.2019.2907912
- [2] G. Kornaros, O. Tomoutzoglou and M. Coppola, "Hardware-assisted Security in Electronic Control Units Utilizing One-Time-Programmable Network-on-Chip and Firewalls", *IEEE Micro*, Volume: 38, Issue: 5, Sep./Oct. 2018, pp. 63-74, 2018
- [3] M. D. Grammatikakis, K. Papadimitriou, P. Petrakis, A. Papagrighoriou, G. Kornaros, I. Christoforakis, O. Tomoutzoglou, G. Tsamis, M. Coppola, "Security in MPSoCs: A NoC Firewall and an Evaluation Framework", *IEEE Trans. on CAD of Integrated Circuits and Systems*, vol 34 – 8, pp.1344-1357, 2015
- [4] G. Kornaros and D. Pnevmatikatos, "Dynamic Power and Thermal Management of NoC-based Heterogeneous MPSoCs", *ACM Transactions on Reconfigurable Technology and Systems (TRETTS)*, volume 7 issue 1, February 2014, Article No. 1, 26 pages
- [5] G. Kornaros and D. Pnevmatikatos, "A Survey and Taxonomy of on-Chip Monitoring of Multi-core Systems-on-Chip", *ACM Trans. Des. Autom. Electron. Syst.* 18, 2, Article 17 (April 2013), 38 pages