

Vasilis Kapsalis CV

Dr Electrical Engineer, Professor at University Of Peloponnese, Patras, Greece

Vassilis Kapsalis received his Diploma in Electrical Engineering and the Ph.D. degree in Electrical and Computer Engineering from the University of Patras, Greece, in 1990 and 1994, respectively. Since 1990 he has participated in several projects in the Department of Electrical Engineering at the University of Patras and at the Institute of Biomedical Technology (INBIT), under the framework of European and Greek programmes. During that period he has developed systems and applications for home/building automation and telemedicine systems. During the period from 1999 until 2007 he has worked as a senior research engineer at the Industrial Systems Institute (ISI), participating in a number of research projects supported by the Greek General Secretariat of Research and Technology and the European Union and joint projects with Greek industry.

Starting from September 2005, he is also with the Hellenic Open University (School of Science and Technology) as a tutor for the postgraduate course Fundamental Specialization in Computer Architecture and Computer Networks. On November 2007, he joined the Electrical Engineering Department of Technological Educational Institute (T.E.I.) of Western Greece, where he teaches courses in data communications and computer networks and since September 2009 he is an Associate Professor. Also, he is head of the Communication Systems and Networks Laboratory.

He has participated in more than 20 research projects under the framework of European and Greek programmes. Currently, he is a member of the research team of two projects: (a) MEMSENSE (funded by the Hellenic Technology Clusters Initiative "Corallia") for developing smart sensor systems, and (b) "Auto demand response (ADR) management system for rational use of electrical energy" co-funded by the Hellenic General Secretariat for Research and Technology.

His research interests include real-time MAC-layer protocols, industrial and home/building networking systems, distributed control architectures, M2M systems, internet technologies and e-services for energy management and automated demand response. He is a reviewer of the Journal IEE Electronics Letters and technical programme committee member of the following international conferences: IEEE Industrial Electronics Society 2002 (IEEE-IECON '02, IECON '03, IECON '05), IEEE International Conference on Industrial Technology (IEEE-ICIT 2005), IADIS International Conference WWW/INTERNET 2006, 2007, 2008, 2009, 2010, International Conference on Web Information Systems and Technologies WEBIST 2006, 2007, 2008, 2009, 2010, 2011. He is the author of 30 scientific papers in these subject areas and has received more than 230 citations.

Publications

1. International Journals

- [1] V.D. Kapsalis, S.A. Koubias and H.C. Haralabidis, ♦New hybrid MAC - layer protocol for real-time bus networks♦, IEE Proc. Commun. vol.141, no 5, pp 325 - 333, Oct. 1994. URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=329911&isnumber=7811>
- [2] V.D. Kapsalis, S.A. Koubias and G.D. Papadopoulos, ♦Implementation of a MAC-layer Protocol (GIT - CSMA/CD) for Industrial LANs and its experimental performance♦, IEEE Trans. on Industrial Electronics, pp. 825-839, December 1997. URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=649944&isnumber=14174>
- [3] C. Zeelemberg, Z. Kolitsi, V. Kapsalis, C. Nimwegen, N. Pallikarakis, ♦BEAM@Net: Telematic Services for Clinical Engineers and Medical Physicists♦, Studies in Health Technology and Informatics, Vol. 43 Pt A, pp. 109-113, 1997.
- [4] Vassilis Kapsalis, Stavros Koubias, George Papadopoulos ♦OPC-SMS: A Wireless Gateway to OPC-based Data Sources♦, Computer Standards & Interfaces, Elsevier Science B.V, Vol. 24, Issue 5, pp. 437-451, November 2002.
- [5] Vassilis Kapsalis, Konstantinos Charatsis, Manos Georgoudakis, Efstratios Nikoloutsos, George Papadopoulos, ♦A SOAP-based system for the provision of e-services♦, Computer Standards & Interfaces, Elsevier Science B.V, Vol. 26, Issue 6, pp. 527-541, October 2004.
- [6] Vassilis Kapsalis, Loukas Hadellis, Dimitris Karelis, Stavros Koubias, ♦A dynamic context-aware access control architecture for e-services♦, Computers & Security, Elsevier Science B.V., Vol. 25, Issue 7, pp. 507-521, October 2006.
- [7] Fidas C., Kapsalis V. Tranoris C. and Avouris N., ♦Synchronous support and monitoring in web♦based educational systems♦, ♦Special Issue on the Synchronous methods and applications in e-learning, The International Journal of Information and Learning Technology♦, Vol. 23, No 3, pp. 138-148, 2006.
- [8] Vassilis Kapsalis, ♦Implementation of an Assessment System Incorporating Web-based Parameterized Questions♦, International Journal of Emerging Technologies in Learning (IJET), Volume 4, Issue 3, pp. 20-28, September 2009.
- [9] Vassilis Kapsalis, Christos Fidas, Loukas Hadellis, ♦Towards a domain-specific context acquisition, presentation and rule-based control platform♦, International Journal of Pervasive Computing and Communications, Volume 9, Issue 1, pp. 72-89, 2013.
- [10] Vassilis Kapsalis and Loukas Hadellis, ♦Optimal Operation Scheduling of Electric Water Heaters under Dynamic Pricing♦, Sustainable Cities and Society, Elsevier, vol. 31, pp. 109♦121, May 2017.

2. Proceedings of International Conferences

- [11] J.B. Gialelis, G.K. Karagianidis, V.D. Kapsalis, L.K. Prentzas, C.J. Georgopoulos, ◆ISDN - TO - INFRARED LINK INTERFACE◆, IEEE International Symposium on Industrial Electronics (IEEE-ISIE◆92), Cat. No. 92TH0371-5, pp. 786 - 789, China, 1992.
- [12] C. Georgopoulos and V. Kapsalis, "Pulse Position coding scheme for wireless infrared (IR) systems", in Proceedings of the International Society for Optical Communications Conference, vol. 2426, ISBN: 0-8194-1774-2, pp. 578-583, Israel, October 1995. URL: http://spie.org/x648.html?product_id=211239
- [13] V.D. Kapsalis, S.A. Koubias and G.D. Papadopoulos, ◆Performance Evaluation of a Hybrid MAC- layer Protocol for Hard Real-Time Industrial Networks◆, IEEE International Symposium on Industrial Electronics (IEEE-ISIE◆95), ISBN: 0-7803-2683-0, pp. 148 - 152, 1995.
- [14] L. Hadelis, V. Kapsalis, ◆Distributed Control Network for Agricultural Applications◆, IFAC-CAEA◆98: Control Applications and Ergonomics in Agriculture◆, ISBN: 0080432298, pp. 351-356, June 1998.
- [15] L. Hadelis, V. Kapsalis, P. Vlachopoulos, ◆Data and Control Network Systems Convergence ◆ A new ◆Concept◆ in System Integration, International Conference on New Horizons in Industry and Education, Session 7, September 1999.
- [16] V. Kapsalis, A. Kalogeras, K. Charatsis, G. Papadopoulos, ◆Seamless Integration of Distributed Real Time Monitoring and Control Applications Utilising Emerging Technologies◆, The 27th Annual Conference of the IEEE Industrial Electronics Society (IEEE-IECON 2001), ISBN: 0-7803-7110-0, pp. 176-181, Denver, USA.
- [17] V. Kapsalis, K. Charatsis, A. Kalogeras, G. Papadopoulos, ◆Web Gateway: A Platform for Industry Services over Internet◆, IEEE International Symposium on Industrial Electronics (IEEE-ISIE'2002), ISBN: 0-7803-7370-7, L' Aquila, Italy, pp. 73-77, July 2002.
- [18] E. Nikoloutsos, A. Prayati, A. Kalogeras, V. Kapsalis, S. Koubias, G. Papadopoulos, "Integrating IP Traffic into Fieldbus Networks", IEEE International Symposium on Industrial Electronics (IEEE-ISIE'2002), ISBN: 0-7803-7370-7, L' Aquila, Italy, pp. 67-72, July 2002.
- [19] M. Georgoudakis, V. Kapsalis, S. Koubias, G. Papadopoulos, ◆Advancements, Trends and Real Time Considerations in Industrial Ethernet Protocols◆, IEEE International Conference on Industrial Informatics (IEEE-INDIN '03), Alberta, Canada, August 2003.
- [20] V. Kapsalis, K. Charatsis, M. Georgoudakis, G. Papadopoulos, ◆Architecture for Web-based services integration◆, The 29th Annual Conference of the IEEE Industrial Electronics Society (IEEE-IECON 2003), ISBN: 0-7803-7906-3, Virginia, USA, pp. 866-871, November 2003.

- [21] V. Kapsalis, J. Gialelis, S. Nikoloutsos, S. Koubias, "Seamless Incorporation of Industrial Data in a B2B Information Infrastructure", 5th IEEE International Workshop on Factory Communication Systems, (IEEE-WFCS 2004), September 2004.
- [22] C. P. Antonopoulos, V. Kapsalis, S. Koubias, "An Efficient Simulator for the PROFIBUS-DP MAC-Layer Protocol", Proceedings of the IFAC Conference on Manufacturing, Modelling, Management and Control (MiM'04) Conference, Athens, Greece, Oct.21-22, 2004.
- [23] V. Kapsalis, C. Fidas, C. Tranoris, A. Stoica, "Edu-Smile: A context-aware service for synchronous support in web-based educational systems", IEEE 5th International Conference on Advanced Learning Technologies (IEEE-ICALT 2005), pp. 378-382, July 2005.
- [24] Β. Καψάλης, Β. Σιμεγιάτου, Χ. Φείδας, "WebTest: Ένα σύστημα αξιολόγησης για εκπαιδευτικές διαδικασίες μέσω του παγκόσμιου ιστού", στο 3rd International Conference on Open and Distance Learning ICOLD 2005, pp. 618-628, Νοέμβριος 2005.
- [25] Χ.Φείδας, Χ. Τρανώρης, Β. Καψάλης, Ν. Αβούρης, "Σχεδιασμός συστημάτων σύγχρονης υποστήριξης και επισκόπησης της εξ αποστάσεως εκπαίδευσης μέσω του παγκόσμιου ιστού", στο 3rd International Conference on Open and Distance Learning ICOLD 2005, pp. 577-585, Νοέμβριος 2005.
- [26] K. Charatsis, A.P. Kalogeras, V. Kapsalis, P. Konstantinopoulos, G. Papadopoulos, "E-Service Provision Platform Using Ontologies", The International Conference on "Computer as a tool" - Eurocon2005, November 2005.
- [27] V. Kapsalis, D. Karelis, L. Hadellis, G. Papadopoulos, "A context-aware access control framework for e-services provision", IEEE International Conference on Industrial Technology, ICIT 2005, December 2005, pp. 932-937, ISBN: 0-7803-9484-4.
- [28] V. Kapsalis, C. Fidas, L. Hadellis, C. Karavasilis, M. Galetakis and C. Katsenos, "A Networking Platform for Real-Time Monitoring and Rule-Based Control of Transport Fleets and Transferred Goods", in the 13th International IEEE Conference on Intelligent Transportation Systems, ITSC 2010, Madeira Island, Portugal, 19 - 22 September 2010, pp. 295-300.
- [29] Ch. Antonopoulos, V. Kapsalis, L. Hadellis, "Optimal Scheduling of Smart Homes Appliances for the Minimization of Energy Cost under Dynamic Pricing", in 17th IEEE International Conference on Emerging Technologies & Factory Automation (ETFA 2012), Krakow, Poland, pp. 1-4, September 2012.
- [30] S. Soursos, V. Kapsalis, G. Petropoulos, Y. Karras and L. Hadellis, "A Demand Response System for Hierarchically Organized Aggregators in Smart Grids", in The International Workshop on Simulation for Energy, Sustainable Development & Environment, 25-27 September, 2013, Athens, Greece, pp. 92-100, ISBN: 978-88-97999-27-0.