

INTERNATIONAL HELLENIC UNIVERSITY

SCHOOL OF ENGINEERING

Department of Informatics, Computer and Telecommunications Engineering Sector of Telecommunications and Computer Networks

Dr. Anastasios Christos Politis

Assistant Professor

Short Curriculum Vitae

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EDUCATION

- Bachelor in Electronic and Electrical Engineering (BEng) with Honours, University of Surrey, Department of Electronic and Electrical Engineering, (June 1997).
- **Dipl.-Eng. in Electrical Engineering and Computer Technology**, University of Patras, Department of Electrical Engineering and Computer Technology, (October 1999).
- M.Sc. in Integrated Hardware and Software Systems, University of Patras, Department of Electrical Engineering and Computer Technology, (September 2001). *Thesis: Study and Evaluation of the Berkeley Snoop Protocol in Linux Platform and IEEE 802.11 Wireless Local Area Network (Supervisor: Prof. E. Varvarigos).*
- **Ph.D. in Applied Informatics**, University of Macedonia, Department of Applied Informatics (September 2011). *Thesis: Quality of Service Provisioning in IEEE 802.11e Wireless Local Area Networks (Prof. A. Manitsaris).*

LANGUAGES

- English : Fluent
- German : Intermediate

HONORS, AWARDS AND SCHOLARSHIPS

- **Research scholarship** of 1.878,21 Euros during my postgraduate studies at the University of Patras.
- **Best Paper Award** for a research paper presented at the 6th International Conference on Wireless and Mobile Communications (ICWMC 2010), Valencia, Spain, 20 25 September 2010.
- **Honorary Letter** from the Greek Ministry of Education for Academic Excellence (December 2012).

PROFESSIONAL EXPERIENCE

• 2018-Today, Assistant Professor at the Department of Informatics, Computer and Telecommunications Engineering of the International Hellenic University.

- 2011-2018, Lecturer at the Department of Informatics Engineering of the Technological & Educational Institute of Central Macedonia, Serres, Greece.
- 2002-2011, **Laboratory Associate** at the Department of Informatics and Communications of the Technological and Educational Institute of Serres, Serres, Greece.
- 2007-2008, **Researcher** at the Center for Technological Research (KTE) of the Technological and Educational Institute of Serres, Serres, Greece. Participated in the DVB-T research project for the County of Serres.
- 2001-2003, **Signals Officer** in the Greek Army performing duties at the "HERMES" Telecommunications System.
- 2000-2001, Electrical Engineer at the Department of Research and Development of the INTRACOM S.A., Patras, Greece. Participated in the "*IST-1999-10028 Wireless Internet Networks* (*WINE*)" and "*Fast Internet over Satellite*" projects of the company.

TEACHING EXPERIENCE

- 2002-Today, **Undergraduate courses taught**: Computer Networks, Internet Technologies, Security and Management of Computer Networks, Advanced Computer Networks, Information Theory, Probability and Statistics, Telecommunications Systems, Operating Systems.
- 2012-Today, **Postgraduate courses taught**: Computer Networks, Computer Networks Management and Design, Communications Protocols (in English), Information Theory and Error Control Coding (in English).

ADMINISTRATIVE EXPERIENCE

- 2020-today, **Deputy Head** of the MSc Programme in Telecommunications and Computer Networks.
- 2017-today, Administrator of the Department's CISCO Academy.
- 2014-today, Member of the Department's Quality Assurance Unit,
- 2012-today, **Replacement member** of the Institution's Scientific Committee of the Center of Information and Communications Technology Support (KYTEII).
- 2011-today, **Member** of the Department's Telecommunications and Networking Sector.
- 2011-today, **Head**, **member and replacement member** of more than 20 Institution's administrative committees.

Research and Development Projects

- April 2019-April 2020: **Principal Investigator** for the project: MAC-layer enhancement mechanisms in next generation WLANs. Research Committee, TEI of Central Macedonia, Serres, Greece.
- April 2018-June 2018: **Principal Investigator** for the project: Analysis of the MAC-layer functionality in next generation WLANs. Research Committee, TEI of Central Macedonia, Serres, Greece.
- October 2017-June 2018: **Principal Investigator** for the project: *Efficient Resource Management in Multimedia Wireless Local Area Networks*. Research Committee, TEI of Central Macedonia, Serres, Greece.

- May 2015-September 2016: **Principal Investigator** for the project: *Development of Mechanisms for Counteracting Attacks aiming at altering the MAC-layer functionality in Wireless Multimedia Networks*. Research Committee, TEI of Central Macedonia, Serres, Greece.
- June 2013-April 2014: **Principal Investigator** for the project: *The effects of the No Acknowledgment (NoACK) Policy on the Efficiency of Voice over IP Applications in IEEE 80211e Wireless Networks*. Research Committee, TEI of Central Macedonia, Serres, Greece.
- March 2013-September 2015: Technical Supervisor for the project: *Open Courses at TEI of Serres*. Research Committee, TEI of Serres, Serres, Greece.
- September 2006-October 2007: Associate for the project: *Advanced Tele-Education Services*. *Research Committee*, TEI of Serres, Serres, Greece.

Research Interests

- Computer Networks
- Communication Protocols
- Fraud Detection in Wireless Networks

PUBLICATIONS

BOOKS

• K. Hilas, <u>A. Politis</u> and A. Vakaloudis, 2015. *Computer Networks - Laboratory Exercises*. [ebook] Athens:Hellenic Academic Libraries Link. Available Online at: http://hdl.handle.net/11419/1763

JOURNALS

- <u>A. Politis</u> and H. T. Anastassiu, "Performance Analysis of Resource Sharing during Downlink Multi-User Transmissions in CSMA/ECA Full Duplex WLANs", Transport and Telecommunications, Vol. 21, Issue 1, pp. 61-68, Feb. 2020.
- <u>A. Politis</u> and C. S. Hilas, "CSMA/CA analysis and enhancement for IEEE 802.11ax WLANs operating in STR mode", IET Electronics Letters, Volume 54, Issue 12, pp. 764-766, June 2018.
- <u>A. Politis</u> and C. S. Hilas, "CTS-to-self as a protection mechanism of the no acknowledgment protocol in voice over internet protocol WLANs", *IET Networks*, 2017. (*under review*)
- <u>A. Politis</u>, P. Kyramaridis and C. Hilas, "A MAC-centric Approach to Detect and Mitigate EDCA Misbehavior Attacks", *Journal of Engineering Science and Technology Review (JESTR)*, Volume 9, Issue 5, pp. 93-96, 2016. [Q3 SCIMAGO]
- C. S. Hilas, and <u>A. Politis</u>, "Motivating students' participation in a computer networks course by means of magic, drama and games", *SpringerPlus*, 3:362, DOI: 10.1186/2193-1801-3-3622014, 2014.
- <u>A. Politis</u>, C. Hilas and A. Papatsoris, "Optimising No Acknowledgment Policy on WLANs supporting Voice over Internet Protocol", *IET Electronics Letters*, Volume 50, Issue 1, January 2014.
- <u>A. Politis</u>, I. Mavridis and A. Manitsaris, "Exploiting Multimedia Frame Semantics and MAClayer Enhancements for QoS Provisioning in IEEE 802.11e Congested Networks", *International Journal on Advances in Networks and Services*, Vol. 4, No. 1&2, pp. 176-185, May 2011.
- T. Mastoras, P. Fotaris, <u>A. Politis</u> and A. Manitsaris, "Designing Simplicity: Usability Perspectives on Learning Management Systems", *WSEAS Transactions on Information Science and Applications*, Issue 10, Volume 2, pp. 1731-1738, October 2005.

CONFERENCES

- <u>A. Politis</u> and C. Hilas, "Exploiting Reverse Direction Protocol in Full Duplex WLANs", 9th International Conference on Modern Circuits and Systems Technologies (MOCAST), Bremen, Germany, 7-9 Sept. 2020 (online conference).
- <u>A. Politis</u> and C. Hilas, "DL MU-MIMO with TXOP Sharing and Suppressed Acknowledgments in IEEE 802.11ac WLANs", 41st International Conference on Telecommunications and Signal Processing (TSP), Athens, Greece, 4-6 July 2018.
- <u>A. Politis</u> and C. Hilas, "Sharing Transmission Opportunity in Ad-hoc WLANs Supporting VoIP", 7th International Conference on Modern Circuits and Systems Technologies (MOCAST), Thessaloniki, Greece, 7-9 May 2018. (under review)
- A. P. Filippidis, C. S. Hilas, G. Filippidis and <u>A. Politis</u>, "Information Security Awareness of Greek Higher Education Students Preliminary Findings", 7th International Conference on Modern Circuits and Systems Technologies (MOCAST), Thessaloniki, Greece, 7-9 May 2018. (under review)
- A. Kaponias, <u>A. Politis</u> and C. Hilas, "Simulation and Evaluation of MANET Routing Protocols for Educational Purposes", *2nd Panhellenic Conference in Electronics and Telecommunications (PACET)*, Thessaloniki, Greece, 16-18 March 2012.
- <u>A. Politis</u>, I. Mavridis, A. Manitsaris and C. Hilas, "X-EDCA: A Cross-Layer MAC-Centric Mechanism for Efficient Multimedia Transmission in Congested IEEE 802.11e Networks", 7th IEEE International Conference on Wireless Communications and Mobile Computing (IEEE IWCMC 2011), Istanbul, Turkey, 5-8 July 2011.
- <u>A. Politis</u>, I. Mavridis and A. Manitsaris, "Enhancing Multimedia Traffic Performance in IEEE 802.11e Networks", 6th IEEE/IARIA International Conference on Wireless and Mobile Communications (ICWMC 2010), Valencia, Spain, 20 25 September 2010.
- C. Hilas and <u>A. Politis</u>, "Simulations of various IEEE 802.11b network configurations for educational purposes", *1st Panhellenic Conference in Electronics and Telecommunications* (*PACET*), Patras, Greece, 20-22 March 2009.
- <u>A. Politis</u>, I. Kotini and A. Manitsaris, "Streaming Video Timing Analysis in Wireless Ad-hoc Networks", *13th IEEE Symposium on Computers and Communications (ISCC 2008)*, Marrakech, Morocco, 6-9 July 2008.
- <u>A. Politis</u>, I. Mavridis and A. Manitsaris, "Performance Measurements of a Wireless Classroom in a Simulated Environment", *International Workshop on Network and Grid Technology*, 3rd Balkan Conference in Informatics (BCI 2007), Sofia, Bulgaria, 27-29 September 2007.
- <u>A. Politis</u>, A. Manitsaris and I. Mavridis, "Implementation and Evaluation of TCP Enhancements over Satellite Links", 2nd IEEE/IARIA International Conference on Wireless and Mobile Communications (ICWMC 2006), Bucharest, Romania, 29-31 July 2006.
- T. Mastoras, P. Fotaris, <u>A. Politis</u> and A. Manitsaris, "Establishing Effective Learning Management Systems through Simplicity", 5th WSEAS International Conference on Distance Learning and Web Engineering (DIWEB 2005), Corfu, Greece, 23-25 August 2005.
- <u>A. Politis</u>, A. Manitsaris and I. Mavridis, "Towards Quality of Service Support in Educational Wireless Multimedia Applications", *Annual Conference on Telecommunications and Multimedia (TEMU 2005)*, Heraclion, Crete, Greece, 23-26 June 2005 (in Greek).

TECHNICAL REPORTS

- Α. Δ. Παπατσώρης, Β. Ξηρομερίσιου, <u>Α. Πολίτης</u> και Δ. Μάνος "Μελέτη για την τηλεοπτική κάλυψη των Δήμων του Νομού Σερρών. Φάση 2 Καθορισμός τεχνικών παραμέτρων δικτύου ψηφιακής τηλεόρασης, πάρκο κεραιών και τεχνικές προδιαγραφές & κόστος εξοπλισμού", Εργαστήριο Επικοινωνιών, Τομέας Πληροφορικής & Επικοινωνιών, Κέντρο Τεχνολογικής Έρευνας Σερρών, Απρίλιος 2008.
- Α. Δ. Παπατσώρης, Β. Ξηρομερίσιου, <u>Α. Πολίτης</u> και Δ. Μάνος, "Μελέτη για την τηλεοπτική κάλυψη των Δήμων του Νομού Σερρών. Φάση 1 Αποτύπωση της τρέχουσας κατάστασης και υφιστάμενων εκπομπών", Εργαστήριο Επικοινωνιών, Τομέας Πληροφορικής & Επικοινωνιών, Κέντρο Τεχνολογικής Έρευνας Σερρών, Σεπτέμβριος 2007.
- <u>A. Politis</u> and G. Orphanos, "Implementation of TCP and UDP Enhancements over Satellite", Technical Report 4.1, Project: Fast Internet over Satellite, INTRACOM S.A., 2001.

Research Work Impact

More than fifty (50) citations have been detected in the international literature (Google Scholar and Scopus) excluding self-citations (*h-index: 4*). These citations include journal and conference research papers, as well as Doctoral and Postgraduate Thesis.

REVIEWER IN JOURNALS AND CONFERENCES

- EURASIP Journal on Wireless Communications and Networking (2018)
- Future Generation Computer Systems (Elsevier) (2018)
- American Journal of Networks and Communications (2017)
- International Journal On Advances in Telecommunications (2011 2020)
- International Conference on Modern Circuits and Systems Technology (MOCAST-2019-2020)
- 3rd World Symposium on Communication Engineering (WSCE 2020)
- International Conference on Information, Communication & Computing Technology (ICICCT-2019)
- International Conference on Computer Science & Environmental Engineering (CSEE) (2015)
- International Conference on Electronics, Communications and Networks (CECNet) (2014)
- International Conference in Wireless and Mobile Communications (ICWMC) (2011 2016)

PROFESSIONAL CERTIFICATIONS

- Cisco Certified Network Associate (CCNA).
- Cisco Certified Entry Network Technician (CCENT).
- Certified Fiber Optics Technician (CFOT).
- KONNEX instabus.

PROFESSIONAL AND SCIENTIFIC MEMBERSHIPS

- **IEEE Member** (Member No. 91253769)
- FITCE (Federation of Telecommunications Engineers of the European Community) Member
- Technical Chamber of Greece member (Member No. 83695)