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Σύνοψη

Ο Δρ. Ευάγγελος Βλάχος είναι Εντεταλμένος Ερευνητής στο Ινστιτούτο Βιομηχανικών Συστημάτων (ΙΝΒΙΣ) του ΕΚ «ΑΘΗΝΆ», όπου έχει συγκροτήσει και ηγείται μιας αυτοδύναμης ερευνητικής ομάδας με επιστημονικό επίκεντρο την Ενιαία Επικοινωνία, Έλεγχο και Ανίχνευση (Joint Communication, Control, and Sensing - JC&S). Ασκεί ουσιαστική επιστημονική διοίκηση (Scientific Leadership) καθοδηγώντας μεταδιδακτορικούς ερευνητές και υποψήφιους διδάκτορες, ενώ το ερευνητικό του έργο τυγχάνει διεθνούς αναγνώρισης με 47 δημοσιεύσεις, βραβεύσεις (Platinum Best Paper Award) και θεσμικές συνεργασίες με πανεπιστήμια του εξωτερικού (Univ. of Sussex, Edinburgh). Παράλληλα, επιδεικνύει υψηλή αποτελεσματικότητα στην προσέλκυση πόρων, έχοντας διασφαλίσει ως Επιστημονικός Υπεύθυνος (PI) χρηματοδότηση άνω των 850.000€ μέσω ανταγωνιστικών έργων (EUSOME, SPLASH), συνδέοντας τη θεμελιώδη έρευνα με τη βιομηχανική καινοτομία.

Περιοχές Εξειδίκευσης

Non-linear & Intelligent Control for CPS; Distributed Model Predictive Control (MPC) for UAV Networks; Scientific Machine Learning (Deep Unfolding) & Physics-Aware AI; Joint Sensing, Communication and Control Co-design; Graph Signal Processing; Convex Optimization & Beamforming.

Σπουδές (Qualifications)

2009-2015	**Ph.D.** με θέμα Wireless Communications and Signal Processing, Πανεπιστήμιο Πατρών. Διατριβή: *Efficient tranceiver techniques for interference and fading mitigation in wireless communication systems*, Επιβλέπων: Καθ. Κ. Μπερμπερίδης, Βαθμός: 10/10.
2006-2009	**M.Sc.** in Information Processing and Machine Learning, Πανεπιστήμιο Πατρών. Διατριβή: *Adaptive techniques for V-BLAST like receivers for MIMO systems*, Επιβλέπων: Καθ. Κ. Μπερμπερίδης, Βαθμός: 10/10.
1999-2005	**Πτυχίο** (Diploma) of Computer Engineering and Informatics, Πανεπιστήμιο Πατρών. *Analysis and Implementation of Equalization Methods for MIMO systems in Frequency Domain*, Επιβλέπων: Prof. K. Berberidis, Βαθμός: 8/10.

Επαγγελματική Εμπειρία

2019-σήμερα	**Εντεταλμένος Ερευνητής (Ερευνητής Γ')** *Ινστιτούτο Βιομηχανικών Συστημάτων, Ε.Κ. ΑΘΗΝΑ.*
2024-2025	**Επιστημονικός Ερευνητής (Research Fellow)**

	School of Engineering and Informatics, University of Sussex, UK.
2017-2019	**Μεταδιδακτορικός ερευνητής**, Institute for Digital Communications *School of Engineering, University of Edinburgh, UK.*
2016-2017	**Μεταδιδακτορικός ερευνητής**, Visualization and Virtual Reality Group *Τμήμα Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών, Πανεπιστήμιο Πατρών.*
2015-2016	**Μεταδιδακτορικός ερευνητής**, Signal Processing and Communications Lab *Τμήμα Μηχανικών Υπολογιστών και Πληροφορικής, Πανεπιστήμιο Πατρών.*

Βραβεία

2017	"World's FIRST 10K Best Paper Award - Platinum Award" on efficient graph-based matrix completion of incomplete animated 3D point-clouds.
2009	Υποτροφία μεταπτυχιακών σπουδών.

2023-σήμερα	Συνεργασία με **Hellenic U-Space Industry (HUSI)** on joint sensing, communication and control of aerial vehicles in the project SPLASH.
2022-σήμερα	Συνεργασία με **Quantum Neural Technologies** σε κβαντικούς αλγορίθμους αναζήτησης για τη βελτιστοποίηση τηλεπικοινωνιακών δικτύων.
2020-σήμερα	Collaboration with **Hellenic Drones** on multi-modal localization and path planning for drones, and in the joint project HERMES.
2017-2018	Research collaboration with Mathematical and Algorithmic Sciences Lab, **Huawei Technologies France**.

Συμμετοχή σε Ερευνητικά Έργα

2025-2029	**EUSOME** Horizon Europe Excellence Hub (Ρόλος: **PI**) *Enabling Autonomous Aerial Systems through Operational Methods and Technological Enhancements*
2023-2026	**SPLASH** Βιομηχανική χρηματοδότηση (Ρόλος: **PI**) *Signal processing for physical layer design of joint sensing, communication and control of aerial vehicles*
2023-2026	**TERRAMETA** 6G-SNS funding (Ρόλος: Ερευνητής) *TERahertz ReconfigurAble METAsurfaces for Ultra-high Rate Wireless Communications*
2023	**FIRA-DAV** Athena Internal PoC (Ρόλος: **PI**) *Ανάπτυξη πρότυπης βάσης δεδομένων ραντάρ/κάμερας για αυτόνομα συστήματα.*
2022	**HERMES** H2020 Smart4all funding (Ρόλος: **Scientific Responsible**) *Enhanced Fire Management System via drones*
2019-2020	**CPSoSaWare** (European Horizon H2020) *Cross-layer cognitive optimization tools & methods for the lifecycle support of dependable Cyber-Physical-Systems of Systems*
2016–2017	**myAirCoach** (European Horizon H2020) *Analysis, modelling and sensing of both physiological and environmental factors for the customized and predictive self-management of Asthma*
2015–2016	**HANDiCAMS** (European FP7 FET) *Heterogeneous Ad-Hoc Networks for Distributed, Cooperative, and Adaptive Multimedia Signal Processing*
2012–2015	**ENDECON** (Ελληνικό πρόγραμμα ΘΑΛΗΣ)

Energy efficient Design of Communications Networks

Διδακτική και Ερευνητική Επίβλεψη

2023-2025	**Διδάσκων**, Τμήμα Φυσικής, Πανεπιστήμιο Πατρών. Αυτοδύναμη διδασκαλία των μαθημάτων «Ψηφιακές Επικοινωνίες» και «Κινητές Επικοινωνίες» στο Π.Μ.Σ. «Εφαρμοσμένη Φυσική».
2021-σήμερα	**Κύριος Επιβλέπων** Υποψήφιου Διδάκτορα (Νικόλαος Νταβανέλος) και μέλος συμβουλευτικών επιτροπών.
2021-2022	**Συν-επιβλέπων** μεταπτυχιακών φοιτητών στο Πανεπιστήμιο Πατρών σε συνεργασία με το ΕΚ «ΑΘΗΝΆ».
2019	**Lecturer**, School of Engineering, University of Edinburgh, UK. Διδασκαλία στο προπτυχιακό μάθημα Advanced Coding Techniques.
2011-2013	**Εργαστηριακός Συνεργάτης**, ΤΕΙ Πατρών (νυν Παν. Πελοποννήσου). Διδασκαλία μαθημάτων Ψηφιακής Επεξεργασίας Σήματος.

Άλλες Επαγγελματικές Δραστηριότητες

- **Workshop Chair:** Workshop on Emerging Technologies in Autonomous Aerial Systems and Environmental Monitoring (SkySense 2025), στα πλαίσια του IEEE ISC2 2025.
- **Special Session Chair:** "Key enabling technologies for the physical-layer of 6G communications", 30th IFIP/IEEE VLSI-SoC 2022.
- **Reviewer:** Σε διεθνή περιοδικά κύρους (IEEE Trans. on Wireless Communications, IEEE Trans. on Vehicular Technology, IEEE Signal Processing Letters κ.α.).
- **Μέλος Επιτροπών:** EURASIP Technical Area Committee on Signal Processing for Communications and Networking (TAC SPCN).

Τεχνικές Δεξιότητες

Γλώσσες Προγραμματισμού & Λογισμικό
MATLAB/Simulink, Python (PyTorch for Scientific ML), C/C++, Julia Lang, LabView, LaTeX, Linux/Unix Shell Scripting.

Επεξεργασία Σήματος & Τηλεπικοινωνίες
Software Defined Radios (USRP), mmWave/THz Communications, Massive MIMO Beamforming, Reconfigurable Intelligent Surfaces (RIS), Integrated Sensing and Communications (ISAC), Radar Signal Processing (FMCW, OTFS), Graph Signal Processing.

Έλεγχος & Ρομποτική
Model Predictive Control (MPC) & Distributed MPC, UAV Flight Control Systems, Hardware-in-the-Loop (HIL) Simulation, Swarm Intelligence, ADMM-based Cooperative Control.

Μηχανική Μάθηση & Μαθηματικά
Model-based AI (Deep Unfolding), Convex Optimization (CVX), Matrix Completion, Quantum Computing Algorithms (Search/Optimization), Time Series Analysis.

Ενσωματωμένα Συστήματα & Υλικό
Embedded AI Units, mmWave Radar Sensors (e.g., TI IWR6843), Drone Platforms Integration.

Κατάλογος Δημοσιεύσεων

Υποβληθείσες / Υπό Κρίση Εργασίες (Submitted / Under Review)

2026

[S7] E. Vlachos, G. Alexiou, G. Papastefanatos, and A. Sakellaropoulou. Enabling Safe and Scalable UAV Swarms: ISAC Technology, GNSS Resilience, and Risk Modeling in U-space. *Under revision for resubmission to SESAR Innovation Days*, 2026

[S6] D. E. Venetis, E. Vlachos, and K. Berberidis. A New Consensus-Driven Cooperative Localization Technique for UAV Swarms under Intermittent GPS. In *Submitted to IEEE International Conference on Communications (ICC)*, 2026

[S3] N. Ntavanelos and E. Vlachos. Regularized Deep Unfolding Conjugate Gradient Detector for MIMO-OTFS Channels. In *Submitted to IEEE ICASSP*, 2026

[S2] C. Vitale, E. Vlachos, P. Kolios, and G. Ellinas. Intelligent UAV Path Planning for Ergodic Rate Maximization of MIMO Multipath Channels. In *Submitted to IEEE International Conference on Communications (ICC)*, 2025

[S1] E. Vlachos. Regularized Distributed MPC for UAV Networks: Stabilizing Coupled Motion and Hybrid Beam Alignment. *Submitted to IEEE Control Systems Letters (L-CSS)*, 2026

2025

[S5] G. C. Alexandropoulos, K. D. Katsanos, and E. Vlachos. Receiving RISs: Enabling Channel Estimation and Autonomous Configuration. In *Submitted to Book Chapter*. Under Review, 2025. Preprint available at arXiv:2506.10662

[S4] E. Vlachos and A. Kaushik. Turning Interference into Diversity: Covariance-based Spatial Partitioning for Massive MIMO ISAC. *Submitted to IEEE Transactions on Wireless Communications*, 2025

Κεφάλαια Βιβλίων (Book Chapters)

2025

[BC1] Evangelos Vlachos, Aryan Kaushik, and George Alexandropoulos. Integrated Sensing and Communications for Future Wireless Networks: Principles, Advances and Key Enabling Technologies. *Elsevier Book Chapter*, 2024

Περιοδικά (Journals)

2025

[J15] Evangelos Vlachos, Christos Mavrokefalidis, Kostas Berberidis, and George C. Alexandropoulos. Improving Wideband Massive MIMO Channel Estimation With UAV State-Space Information. *IEEE Transactions on Vehicular Technology*, 2025. doi: 10.1109/tvt.2025.3569350

2022

[J14] A. Kaushik, E. Vlachos, M. Nekovee, J. Thompson, and F. Courts. Towards 6G: Spectrally efficient joint radar and communication with radio frequency selection, interference and hardware impairments. *IET Signal Processing*, 2022a. doi: 10.1049/sil2.12131

2021 **[J12]** E. Vlachos and J. Thompson. Energy-Efficiency Maximization of Hybrid Massive MIMO Precoding With Random-Resolution DACs via RF Selection. *IEEE Transactions on Wireless Communications*, 2021. doi: 10.1109/twc.2020.3030772

[J11] A. Kaushik, E. Vlachos, C. Tsinos, J. Thompson, and S. Chatzinotas. Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *IEEE Transactions on Green Communications and Networking*, 2021. doi: 10.1109/tgcn.2020.3026725

2020 **[J13]** E. Vlachos, J. Thompson, A. Kaushik, and C. Masouros. Radio-frequency chain selection for energy and spectral efficiency maximization in hybrid beamforming under hardware imperfections. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 2020. doi: 10.1098/rspa.2020.0451

[J10] A. S. Lalos, E. Vlachos, K. Berberidis, A. Fournaris, and C. Koulamas. Robust and Efficient Privacy Preservation in Industrial IoT via correlation completion and tracking. In *2019 IEEE 17th International Conference on Industrial Informatics (INDIN)*, pages 1225–1228, 2019c. doi: 10.1109/indin41052.2019.8972154

2019 **[J9]** E. Vlachos, G. Alexandropoulos, and J. S. Thompson. Wideband MIMO Channel Estimation for Hybrid Beamforming Millimeter Wave Systems via Random Spatial Sampling. *IEEE Journal of Selected Topics in Signal Processing*, 2019a. doi: 10.1109/jstsp.2019.2937633

[J8] A. Kaushik, J. Thompson, E. Vlachos, C. Tsinos, and S. Chatzinotas. Dynamic RF Chain Selection for Energy Efficient and Low Complexity Hybrid Beamforming in Millimeter Wave MIMO Systems. *IEEE Transactions on Green Communications and Networking*, 2019a. doi: 10.1109/tgcn.2019.2931613

[J7] A. S. Lalos, E. Vlachos, G. Arvanitis, K. Moustakas, and K. Berberidis. Signal Processing on Static and Dynamic 3D Meshes: Sparse Representations and Applications. *IEEE Access*, 7:15779–15803, 2019b. doi: 10.1109/access.2019.2894533

2018 **[J6]** E. Vlachos, George C. Alexandropoulos, and J. Thompson. Massive MIMO Channel Estimation for Millimeter Wave Systems via Matrix Completion. *IEEE Signal Processing Letters*, 2018a. doi: 10.1109/lsp.2018.2870533

[J5] E. Vlachos, A. S. Lalos, A. Spathis-Papadiotis, and K. Moustakas. Distributed consolidation of highly-incomplete dynamic point clouds based on rank minimization. *IEEE Transactions on Multimedia*, 2018d. doi: 10.1109/TMM.2018.2839911

[J4] E. Vlachos, A. S. Lalos, K. Berberidis, and J. Thompson. Adaptive Windowing for ICI Mitigation in Vehicular Communications. *IEEE Wireless Communications Letters*, 2018c. doi: 10.1109/lwc.2018.2842226

2016 **[J3]** A. Lalos, I. Nikolas, E. Vlachos, and K. Moustakas. Compressed Sensing for Efficient Encoding of Dense 3D Meshes Using Model-Based Bayesian Learning. *IEEE Transactions on Multimedia*, 2017. doi: 10.1109/TMM.2016.2605927

[J2] E. Vlachos, A. S. Lalos, and K. Berberidis. Low-complexity OSIC equalization for OFDM-based Vehicular Communications. *IEEE Transactions on Vehicular Technology*, 2016. doi: 10.1109/TVT.2016.2598185

2012 **[J1]** E. Vlachos, A.S. Lalos, and K. Berberidis. Stochastic Gradient Pursuit for Adaptive Equalization of Sparse Multipath Channels. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, 2(3):413–423, 2012b. doi: 10.1109/JETCAS.2012.2214631

Συνέδρια (Conferences)

2025 **[C31]** E. Vlachos and G. Alexandropoulos. Biconvex Optimization for Time-Domain Channel Estimation Under Dual-Wideband Fading Conditions. In *33rd European Signal Processing Conference (EUSIPCO)*, 2025. doi: 10.23919/eusipco63237.2025.11226656

2023 **[C30]** E. Vlachos, C. Mavrokefalidis, and K. Berberidis. Velocity-aided Channel Estimation for Spatially Selective mmWave Massive MIMO Communications. In *31st European Signal Processing Conference (EUSIPCO)*, 2023. doi: 10.23919/eusipco58844.2023.10289899

[C29] Evangelos Vlachos and Aryan Kaushik. Subset Selection Based RIS-Aided Beamforming for Joint Radar-Communications. In *2023 IEEE Wireless Communications and Networking Conference (WCNC)*, pages 1–6, 2023b. doi: 10.1109/wcnc55385.2023.10119089

[C28] Evangelos Vlachos and Aryan Kaushik. Covariance-Based Hybrid Beamforming for Spectrally Efficient Joint Radar-Communications. In *IEEE International Conference on Communications (ICC)*, 2023a. doi: 10.1109/icc45041.2023.10279571

2022 **[C27]** Evangelos Vlachos and Kostas Blekos. Quantum Computing-Assisted Channel Estimation for Massive MIMO mmWave Systems. In *2022 IFIP/IEEE 30th International Conference on Very Large Scale Integration (VLSI-SoC)*, 2022. doi: 10.1109/vlsi-soc54400.2022.9939656

[C26] Evangelos Vlachos, Evangelos D. Spyrou, Chrysostomos Stylios, and Kostas Berberidis. Optimal MmWave Sensor Selection for Bearing-Only Localization in Smart Environments. In *2022 30th Mediterranean Conference on Control and Automation (MED)*, pages 152–157, 2022. doi: 10.1109/med54222.2022.9837261

[C25] Aryan Kaushik, Evangelos Vlachos, Christos Masouros, Christos Tsinos, and John Thompson. Green Joint Radar-Communications: RF Selection with Low Resolution DACs and Hybrid Precoding. In *IEEE International Conference on Communications (ICC) 2022*, pages 3160–3165, 2022b. doi: 10.1109/icc45855.2022.9838485

[C24] Evangelos Vlachos and Aris S. Lalos. ADMM-based Cooperative Control for Platooning of Connected and Autonomous Vehicles. In *ICC 2022 - IEEE International Conference on Communications*, pages 4242–4247, 2022. doi: 10.1109/icc45855.2022.9839099

2020 **[C23]** G. Alexandropoulos, E. Vlachos, and B. Smida. Joint Localization and Channel Estimation for UAV-Assisted Millimeter Wave Communications. In *2020 54th Asilomar Conference on Signals, Systems, and Computers*, 2020a. doi: 10.1109/ieeeconf51394.2020.9443514

[C22] G. C. Alexandropoulos and E. Vlachos. A Hardware Architecture For Reconfigurable Intelligent Surfaces with Minimal Active Elements for Explicit Channel Estimation. In *ICASSP 2020 - 2020 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 9175–9179, 2020. doi: 10.1109/icassp40776.2020.9053976

[C21] G. C. Alexandropoulos, E. Vlachos, and J. Thompson. Wideband Channel Tracking for Millimeter Wave Massive Mimo Systems with Hybrid Beamforming Reception. In *ICASSP 2020 - 2020 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 8698–8702, 2020b. doi: 10.1109/icassp40776.2020.9053440

2019

[C20] A. Kaushik, C. Tsinos, E. Vlachos, and J. Thompson. Energy Efficient ADC Bit Allocation and Hybrid Combining for Millimeter Wave MIMO Systems. In *2019 IEEE Global Communications Conference (GLOBECOM)*, pages 1–6, 2019b. doi: 10.1109/globecom38437.2019.9014072

[C19] A. Lalos, G. Arvanitis, E. Vlachos, and K. Moustakas. Energy Efficient Transmission of 3D Meshes Over MMWave-Based Massive MIMO Systems. In *2019 IEEE International Conference on Multimedia and Expo (ICME)*, pages 1714–1719, 2019a. doi: 10.1109/icme.2019.00295

[C18] E. Vlachos, G. C. Alexandropoulos, and J. Thompson. Hybrid Beamforming with Random Analog Sampling for Wideband Channel Estimation in Millimeter Wave Massive MIMO Systems. In *2019 IEEE 20th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, pages 1–5, 2019b. doi: 10.1109/spawc.2019.8815512

[C17] E. Vlachos, J. Thompson, M. A. Babar Abbasi, V. F. Fusco, and M. Matthaiou. Robust Estimator for Lens-based Hybrid MIMO with Low-Resolution Sampling. In *2019 IEEE 20th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, pages 1–5, 2019c. doi: 10.1109/spawc.2019.8815573

[C16] A. Kaushik, E. Vlachos, and J. Thompson. Energy Efficiency Maximization of Millimeter Wave Hybrid MIMO Systems with Low Resolution DACs. In *IEEE International Conference on Communications (ICC) 2019*, pages 1–6, 2019c. doi: 10.1109/icc.2019.8761357

2018

[C15] A. Kaushik, E. Vlachos, J. Thompson, and A. Perelli. Efficient Channel Estimation in Millimeter Wave Hybrid MIMO Systems with Low Resolution ADCs. In *2018 26th European Signal Processing Conference (EUSIPCO)*, pages 1825–1829, 2018. doi: 10.23919/eusipco.2018.8553303

[C14] E. Vlachos, A. Kaushik, and J. Thompson. Energy Efficient Transmitter with Low Resolution DACs for Massive MIMO with Partially Connected Hybrid Architecture. In *2018 IEEE 87th Vehicular Technology Conference (VTC Spring)*, pages 1–5, 2018b. doi: 10.1109/vtcspring.2018.8417650

[C13] E. Vlachos and J. Thompson. Dithered Beamforming for Channel Estimation in Mmwave-Based Massive Mimo. In *2018 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 3604–3608, 2018. doi: 10.1109/icassp.2018.8461911

2017 **[C12]** E. Vlachos, A. S. Lalos, K. Moustakas, and K. Berberidis. Efficient graph-based matrix completion on incomplete animated models. In *2017 IEEE International Conference on Multimedia and Expo (ICME)*, pages 1548–1553, 2017b. doi: 10.1109/icme.2017.8019502

[C11] E. Vlachos, A. S. Lalos, K. Berberidis, and C. Tselios. Autonomous driving in 5G: Mitigating interference in OFDM-based vehicular communications. In *2017 IEEE 22nd International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD)*, pages 1–6, 2017a. doi: 10.1109/camad.2017.8031619

2016 **[C10]** E. Vlachos and K. Berberidis. Adaptive completion of the correlation matrix in wireless sensor networks. In *24th European Signal Processing Conference (EUSIPCO)*, pages 1403–1407, 2016. doi: 10.1109/eusipco.2016.7760479

[C9] C. G. Tsinos, E. Vlachos, and K. Berberidis. Blind distributed beamforming via matrix completion. In *2016 IEEE 17th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, pages 1–6, 2016. doi: 10.1109/spawc.2016.7536750

[C8] C. Mavrokefalidis, D. Ampeliotis, E. Vlachos, K. Berberidis, and E. Varvarigos. Supervised energy disaggregation using dictionary-based modelling of appliance states. In *2016 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe)*, pages 1–6, 2016. doi: 10.1109/isgteurope.2016.7856277

2013 **[C7]** E. Vlachos, A.S. Lalos, and K. Berberidis. Galerkin projections-based ICI cancellation in OFDM systems with doubly selective channels. In *18th International Conference on Digital Signal Processing (DSP)*, pages 1–6, 2013a. doi: 10.1109/icdsp.2013.6622686

[C6] E. Vlachos, A.S. Lalos, and K. Berberidis. Regularized MMSE ICI equalization for OFDM systems over doubly selective channels. In *IEEE International Symposium on Signal Processing and Information Technology*, pages 458–463, 2013b. doi: 10.1109/isspit.2013.6781924

[C5] C. G. Tsinos, E. Vlachos, and K. Berberidis. Distributed blind adaptive computation of beamforming weights for relay networks. In *2013 IEEE 24th International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, pages 570–574, 2013. doi: 10.1109/PIMRC.2013.6666200

[C4] V. Kekatos, E. Vlachos, D. Ampeliotis, G. Giannakis, and K. Berberidis. A decentralized approach to generalized power system state estimation. In *IEEE 5th International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP)*, 2013. doi: 10.1109/camsap.2013.6714011

[C3] E. Adamidi, E. Vlachos, A. Dermitzakis, K. Berberidis, and N. Pallikarakis. A scheme for X-ray medical image denoising using sparse representations. In *IEEE 13th International Conference on Bioinformatics and Bioengineering (BIBE)*, 2013. doi: 10.1109/bibe.2013.6701544

2012 **[C2]** E. Vlachos, A. Lalos, G. Lionas, and K. Berberidis. Compressed Sensing Techniques for Decision Feedback Equalization of Sparse Wireless Channels. In *IEEE 75th Vehicular Technology Conference (VTC Spring)*, 2012a. doi: 10.1109/vetecs.2012.6240285

2011 **[C1]** A. Lalos, E. Vlachos, K. Berberidis, and A. Rontogiannis. Greedy algorithms for sparse adaptive decision feedback equalization. In *IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)*, 2011. doi: 10.1109/isspit.2011.6151567