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EDUCATION

PhD, Signal Processing, Carlos III University of Madrid, Spain. Ongoing Thesis Theme: Filtering methods for high dimensional inference and optimization Supervisor: Joaquin Miguez.

MSc, Telecommunications Engineering, Istanbul Technical University, Turkey. 2012 Thesis Title: A structured sparse decomposition method for audio signals

BSc, Telecommunications Engineering, Istanbul Technical University, Turkey. 2010 Thesis Title: Anisotropic diffusion in image processing

PAPERS

- Adaptive noisy importance sampling for stochastic optimization, Ö. D. Akyıldız, I. P. Marino, J. Miguez, IEEE CAMSAP 2017.
- 2. Nudging the Particle Filter, Ö. D. Akyıldız, J. Miguez, arXiv:1708.07801.
- 3. On the Relationship between Online Optimizers and Recursive Filters, Ö. D. Akyıldız, V. Elvira, J. Fernandez-Bes, J. Miguez, NIPS Workshop on Optimizing the Optimizers, Barcelona, Spain, 2016.
- 4. Matrix Factorisation with Linear Filters, Ö. D. Akyıldız, Preprint, arXiv:1509.02088, 2015.
- 5. Online Matrix Factorization via Broyden Updates, Ö. D. Akyıldız, Preprint, arXiv:1506.04389, 2015.
- Primal-Dual Algorithms for Audio Decomposition Using Mixed Norms, İ. Bayram,
 D. Akyıldız, Journal of Signal, Image and Video Processing, 2014.
- 7. An Analysis Prior Based Decomposition Method for Audio Signals, Ö. D. Akyıldız and İ. Bayram, EUSIPCO 2012.

WORK EXPERIENCE

Research Associate, Carlos III University of Madrid, Spain. 2015 – with Signal Processing Group (GTS). on stochastic filters; stochastic optimisation; Monte Carlo methods.

Visiting Research Scientist, Fraunhofer HHI, Berlin, Germany. August 2017 on proximal forward-backward splitting methods; sparse dictionary learning.

Research Assistant, Boğaziçi University, Istanbul, Turkey. 2012 – 2015 under the supervision of A. Taylan Cemgil with Statistical Inference Group. on Bayesian statistics; machine learning; probabilistic inference.

 $\label{eq:Quantitative Researcher, algosis inc.} Quantitative Researcher, algosis inc. \\ on financial time series analysis; portfolio optimization; algorithmic trading. \\$

Research Assistant, Istanbul Technical University, Turkey. 2010-2012 on convex optimisation; machine learning; signal processing.

VISITS & CONFERENCES

SMC 2017 Workshop, Uppsala, Sweden

 $29/8 - 01/9 \ 2017$

NIPS Conference, Barcelona, Spain.

 $5/12 - 10/12 \ 2016$

	European Workshop on Reinforcement Learning, Barcelona.	3/12 - 4/12 2016
	IEEE Workshop on Statistical Signal Processing, Palma, Spain.	26/6 - 29/6 2016
	School of Mathematical Sciences, Queen Mary University of London, UK. • $14/12-24/12$ 2015 — $1/2-5/2$ 2016 — $16/5-20/5$ 2016	
	Sequential Monte Carlo Workshop, Imperial College London, UK. $21/12 - 23/12$ 2015	
TEACHING EXPERIENCE	Teaching Assistant (Voluntarily), Boğaziçi University, Istanbul, Tu Monte Carlo methods (graduate course) \times 3 Instructor: A. Taylan Cemgil, Dept. of Computer Engineering.	rkey. 2013 – 2015
	Bayesian statistics and machine learning (graduate course) \times 2 Instructor: A. Taylan Cemgil, Dept. of Computer Engineering.	2013 - 2014
SKILLS	MATLAB, C, Python, LaTeX.	
GRADUATE SCHOOLS	Dobbiaco Summer School on Probabilistic Numerics Dobbiaco, Italy.	19/6 - 23/6 2017
	Spring School and Workshop on Volatility Dynamics Bernoulli Center, EPFL, Lausanne, Switzerland.	10/4 - 13/4 2017
	Summer School on Uncertainty Quantification for Applied Problem Basque Center for Applied Mathematics, Bilbao, Spain.	as 4/7 - 8/7 2016
	Machine Learning Summer School Max Planck Institute of Intelligent Systems, Tübingen, Germany. (accepted with extremely competitive full financial support.)	13/7 - 24/7 2015
	Foundations and Advances in Stochastic Filtering Barcelona, Spain.	22/6 - 26/6 2015
HONORS	 Protel A.Ş. Graduate Fellowship Istanbul Metropolitan Municipality Undergraduate Fellowship Premiership Undergraduate Fellowship 	2010 - 2012 $ 2005 - 2008 $ $ 2005 - 2010$
TALKS	 Matrix Factorisation with Linear Filters, at UC3M Particle methods for parameter estimation, at Bogazici 	June 6, 2017 November 14, 2016 October 22, 2015 March 31, 2015 November 26, 2013 March 26, 2013 January 21, 2013

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