# Deniz Erdogmus

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 73 papers | 2,166 citations | 29 h-index | 45 g-index |
| 80 ext. papers | 2,850 ext. citations | 4.5 avg, IF | 5.06 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 73 | Improved training efficiency for retinopathy of prematurity deep learning models using comparison versus class labels. *Ophthalmology Science*, **2022**, 100122 | | |
| 72 | Active recursive Bayesian inference using Rényi information measures. *Pattern Recognition Letters*, **2022**, 154, 90-98 | 4.7 | |
| 71 | Target-Related Alpha Attenuation in a Brain-Computer Interface Rapid Serial Visual Presentation Calibration.. *Frontiers in Human Neuroscience*, **2022**, 16, 882557 | 3.3 | 0 |
| 70 | Evaluation of a Deep Learning-Derived Quantitative Retinopathy of Prematurity Severity Scale. *Ophthalmology*, **2021**, 128, 1070-1076 | 7.3 | 9 |
| 69 | EEG-based texture roughness classification in active tactile exploration with invariant representation learning networks. *Biomedical Signal Processing and Control*, **2021**, 67, 102507-102507 | 4.9 | 0 |
| 68 | Universal Physiological Representation Learning With Soft-Disentangled Rateless Autoencoders. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 2928-2937 | 7.2 | 0 |
| 67 | Stochastic Mutual Information Gradient Estimation for Dimensionality Reduction Networks. *Information Sciences*, **2021**, 570, 298-305 | 7.7 | 5 |
| 66 | Learning Invariant Representations from EEG via Adversarial Inference. *IEEE Access*, **2020**, 8, 27074-27085 | 3.5 | 25 |
| 65 | Plus Disease in Retinopathy of Prematurity: Convolutional Neural Network Performance Using a Combined Neural Network and Feature Extraction Approach. *Translational Vision Science and Technology*, **2020**, 9, 10 | 3.3 | 9 |
| 64 | Siamese neural networks for continuous disease severity evaluation and change detection in medical imaging. *Npj Digital Medicine*, **2020**, 3, 48 | 15.7 | 31 |
| 63 | Biosensor prediction of aggression in youth with autism using kernel-based methods **2020**, | | 3 |
| 62 | Disentangled Adversarial Autoencoder for Subject-Invariant Physiological Feature Extraction. *IEEE Signal Processing Letters*, **2020**, 27, 1565-1569 | 3.2 | 6 |
| 61 | Variability in Plus Disease Identified Using a Deep Learning-Based Retinopathy of Prematurity Severity Scale. *Ophthalmology Retina*, **2020**, 4, 1016-1021 | 3.8 | 4 |
| 60 | SSVEP BCI and Eye Tracking Use by Individuals With Late-Stage ALS and Visual Impairments. *Frontiers in Human Neuroscience*, **2020**, 14, 595890 | 3.3 | 4 |
| 59 | Information Theoretic Feature Transformation Learning for Brain Interfaces. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 69-78 | 5 | 6 |
| 58 | Automated Fundus Image Quality Assessment in Retinopathy of Prematurity Using Deep Convolutional Neural Networks. *Ophthalmology Retina*, **2019**, 3, 444-450 | 3.8 | 31 |
| 57 | Classification and comparison via neural networks. *Neural Networks*, **2019**, 118, 65-80 | 9.1 | 11 |

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| 56 | Predicting aggression to others in youth with autism using a wearable biosensor. *Autism Research*, **2019**, 12, 1286-1296 | 5.1 | 28 |
| 55 | Adversarial Deep Learning in EEG Biometrics. *IEEE Signal Processing Letters*, **2019**, 26, 710-714 | 3.2 | 37 |
| 54 | Real-Time Deep Pose Estimation With Geodesic Loss for Image-to-Template Rigid Registration. *IEEE Transactions on Medical Imaging*, **2019**, 38, 470-481 | 11.7 | 27 |
| 53 | Monitoring Disease Progression With a Quantitative Severity Scale for Retinopathy of Prematurity Using Deep Learning. *JAMA Ophthalmology*, **2019**, | 3.9 | 43 |
| 52 | A Quantitative Severity Scale for Retinopathy of Prematurity Using Deep Learning to Monitor Disease Regression After Treatment. *JAMA Ophthalmology*, **2019**, | 3.9 | 31 |
| 51 | Asymmetric Loss Functions and Deep Densely Connected Networks for Highly Imbalanced Medical Image Segmentation: Application to Multiple Sclerosis Lesion Detection. *IEEE Access*, **2019**, 7, 721-1735 | 3.5 | 73 |
| 50 | Automated Diagnosis of Plus Disease in Retinopathy of Prematurity Using Deep Convolutional Neural Networks. *JAMA Ophthalmology*, **2018**, 136, 803-810 | 3.9 | 246 |
| 49 | Effects of simulated visual acuity and ocular motility impairments on SSVEP brain-computer interface performance: An experiment with Shuffle Speller. *Brain-Computer Interfaces*, **2018**, 5, 58-72 | 2 | 6 |
| 48 | Evaluation of a deep learning image assessment system for detecting severe retinopathy of prematurity. *British Journal of Ophthalmology*, **2018**, | 5.5 | 53 |
| 47 | Auto-Context Convolutional Neural Network (Auto-Net) for Brain Extraction in Magnetic Resonance Imaging. *IEEE Transactions on Medical Imaging*, **2017**, 36, 2319-2330 | 11.7 | 113 |
| 46 | INFORMATION THEORETIC FEATURE PROJECTION FOR SINGLE-TRIAL BRAIN-COMPUTER INTERFACES **2017**, 2017, | | 2 |
| 45 | Probabilistic Simulation Framework for EEG-Based BCI Design. *Brain-Computer Interfaces*, **2016**, 3, 171-185 | 2 | 9 |
| 44 | Expert Diagnosis of Plus Disease in Retinopathy of Prematurity From Computer-Based Image Analysis. *JAMA Ophthalmology*, **2016**, 134, 651-7 | 3.9 | 68 |
| 43 | Plus Disease in Retinopathy of Prematurity: Improving Diagnosis by Ranking Disease Severity and Using Quantitative Image Analysis. *Ophthalmology*, **2016**, 123, 2345-2351 | 7.3 | 43 |
| 42 | Plus Disease in Retinopathy of Prematurity: A Continuous Spectrum of Vascular Abnormality as a Basis of Diagnostic Variability. *Ophthalmology*, **2016**, 123, 2338-2344 | 7.3 | 45 |
| 41 | Computer-Based Image Analysis for Plus Disease Diagnosis in Retinopathy of Prematurity: Performance of the "i-ROP" System and Image Features Associated With Expert Diagnosis. *Translational Vision Science and Technology*, **2015**, 4, 5 | 3.3 | 76 |
| 40 | Brain-computer interface with language model-electroencephalography fusion for locked-in syndrome. *Neurorehabilitation and Neural Repair*, **2014**, 28, 387-94 | 4.7 | 51 |
| 39 | Noninvasive brain-computer interfaces for augmentative and alternative communication. *IEEE Reviews in Biomedical Engineering*, **2014**, 7, 31-49 | 6.4 | 92 |

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| 38 | RSVP Keyboard: An EEG Based Typing Interface. *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, **2012**, | 1.6 | 61 |
| 37 | **2012**, | | 1 |
| 36 | Principal curves as skeletons of tubular objects: locally characterizing the structures of axons. *Neuroinformatics*, **2011**, 9, 181-91 | 3.2 | 59 |
| 35 | A framework for rapid visual image search using single-trial brain evoked responses. *Neurocomputing*, **2011**, 74, 2041-2051 | 5.4 | 50 |
| 34 | **2010**, | | 9 |
| 33 | Adaptive Information Filtering with Error Entropy and Error Correntropy Criteria. *Information Science and Statistics*, **2010**, 103-140 | | 1 |
| 32 | Optimal set of EEG electrodes for rapid serial visual presentation. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 4335-8 | 0.9 | 2 |
| 31 | Self-Organizing ITL Principles for Unsupervised Learning. *Information Science and Statistics*, **2010**, 299-349 | | |
| 30 | Classification with EEC, Divergence Measures, and Error Bounds. *Information Science and Statistics*, **2010**, 219-261 | | 2 |
| 29 | Detecting EEG evoked responses for target image search with mixed effect models. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 4988-91 | 0.9 | 2 |
| 28 | Mean shift spectral clustering. *Pattern Recognition*, **2008**, 41, 1924-1938 | 7.7 | 38 |
| 27 | Information Theoretic Feature Selection and Projection. *Studies in Computational Intelligence*, **2008**, 1-22 | 0.8 | 5 |
| 26 | Information cut for clustering using a gradient descent approach. *Pattern Recognition*, **2007**, 40, 796-806 | 7.7 | 26 |
| 25 | Quasi-sliding mode control strategy based on multiple-linear models. *Neurocomputing*, **2007**, 70, 960-974 | 3.4 | 18 |
| 24 | Self-Consistent Locally Defined Principal Surfaces **2007**, | | 14 |
| 23 | A Fusion Approach for Image Triage using Single Trial ERP Detection **2007**, | | 7 |
| 22 | Feature extraction using information-theoretic learning. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2006**, 28, 1385-92 | 13.3 | 97 |
| 21 | From linear adaptive filtering to nonlinear information processing - The design and analysis of information processing systems. *IEEE Signal Processing Magazine*, **2006**, 23, 14-33 | 9.4 | 58 |

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| 20 | Modeling and inverse controller design for an unmanned aerial vehicle based on the self-organizing map. *IEEE Transactions on Neural Networks*, **2006**, 17, 445-60 | | 36 |
| 19 | An analysis of entropy estimators for blind source separation. *Signal Processing*, **2006**, 86, 182-194 | 4.4 | 29 |
| 18 | The Cauchy-Schwarz divergence and Parzen windowing: Connections to graph theory and Mercer kernels. *Journal of the Franklin Institute*, **2006**, 343, 614-629 | 4 | 49 |
| 17 | Spectral feature projections that maximize Shannon mutual information with class labels. *Pattern Recognition*, **2006**, 39, 1241-1252 | 7.7 | 48 |
| 16 | Some Equivalences between Kernel Methods and Information Theoretic Methods. *Journal of Signal Processing Systems*, **2006**, 45, 49-65 | | 20 |
| 15 | Zero-Entropy Minimization for Blind Extraction of Bounded Sources (BEBS). *Lecture Notes in Computer Science*, **2006**, 747-754 | 0.9 | 1 |
| 14 | A mutual information extension to the matched filter. *Signal Processing*, **2005**, 85, 927-935 | 4.4 | 23 |
| 13 | Vector quantization using information theoretic concepts. *Natural Computing*, **2005**, 4, 39-51 | 1.3 | 48 |
| 12 | Optimizing the Cauchy-Schwarz PDF Distance for Information Theoretic, Non-parametric Clustering. *Lecture Notes in Computer Science*, **2005**, 34-45 | 0.9 | 17 |
| 11 | Minimax mutual information approach for independent component analysis. *Neural Computation*, **2004**, 16, 1235-52 | 2.9 | 45 |
| 10 | Lower and Upper Bounds for Misclassification Probability Based on Renyi's Information. *Journal of Signal Processing Systems*, **2004**, 37, 305-317 | | 38 |
| 9 | Image construction methods for phased array magnetic resonance imaging. *Journal of Magnetic Resonance Imaging*, **2004**, 20, 306-14 | 5.6 | 16 |
| 8 | Measuring the signal-to-noise ratio in magnetic resonance imaging: a caveat. *Signal Processing*, **2004**, 84, 1035-1040 | 4.4 | 19 |
| 7 | Minimax Mutual Information Approach for ICA of Complex-Valued Linear Mixtures. *Lecture Notes in Computer Science*, **2004**, 311-318 | 0.9 | 1 |
| 6 | Information Force Clustering Using Directed Trees. *Lecture Notes in Computer Science*, **2003**, 68-82 | 0.9 | 6 |
| 5 | Stochastic error whitening algorithm for linear filter estimation with noisy data. *Neural Networks*, **2003**, 16, 873-80 | 9.1 | 7 |
| 4 | SNR-optimality of sum-of-squares reconstruction for phased-array magnetic resonance imaging. *Journal of Magnetic Resonance*, **2003**, 163, 121-3 | 3 | 62 |
| 3 | Blind source separation using Renyi's marginal entropies. *Neurocomputing*, **2002**, 49, 25-38 | 5.4 | 40 |

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|---|---|---|---|
| 2 | Beyond second-order statistics for learning: A pairwise interaction model for entropy estimation. *Natural Computing*, **2002**, 1, 85-108 | 1.3 | 11 |
| 1 | A Neural Network Perspective to Extended Luenberger Observers. *Measurement and Control*, **2002**, 35, 10-16 | 1.5 | 7 |