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DESCRIPTION

Neurocomputing publishes articles describing recent fundamental contributions in the field of neurocomputing. Neurocomputing theory, practice and applications are the essential topics being covered.

NEW! Neurocomputing's Software Track allows you to expose your complete Software work to the community through a novel Publication format: the Original Software Publication

Overview:

Neurocomputing welcomes theoretical contributions aimed at winning further understanding of neural networks and learning systems, including, but not restricted to, architectures, learning methods, analysis of network dynamics, theories of learning, self-organization, biological neural network modelling, sensorimotor transformations and interdisciplinary topics with artificial intelligence, artificial life, cognitive science, computational learning theory, fuzzy logic, genetic algorithms, information theory, machine learning, neurobiology and pattern recognition.

Neurocomputing covers practical aspects with contributions on advances in hardware and software development environments for neurocomputing, including, but not restricted to, simulation software environments, emulation hardware architectures, models of concurrent computation, neurocomputers, and neurochips (digital, analog, optical, and biodevices).

Neurocomputing reports on applications in different fields, including, but not restricted to, signal processing, speech processing, image processing, computer vision, control, robotics, optimization, scheduling, resource allocation and financial forecasting.

Types of publications:

Neurocomputing publishes reviews of literature about neurocomputing and affine fields.

Neurocomputing reports on meetings, including, but not restricted to, conferences, workshops and seminars.

NEW! The Neurocomputing Software Track
Neurocomputing Software Track publishes a new format, the Original Software Publication (OSP) to disseminate exiting and useful software in the areas of neural networks and learning systems, including, but not restricted to, architectures, learning methods, analysis of network dynamics, theories of learning, self-organization, biological neural network modelling, sensorimotor transformations and interdisciplinary topics with artificial intelligence, artificial life, cognitive science, computational learning theory, fuzzy logic, genetic algorithms, information theory, machine learning, neurobiology and pattern recognition. We encourage high-quality original software submissions which contain non-trivial contributions in the above areas related to the implementations of algorithms, toolboxes, and real systems. The software must adhere to a recognized legal license, such as OSI approved licenses.

Importantly, the software will be a full peer reviewed publication that is able to capture your software updates once they are released. To fully acknowledge the author's/developers work your software will be fully citable as an Original Software Publication, archived and indexed and available as a complete online "body of work" for other researchers and practitioners to discover.

See the detailed Submission instructions, and more information about the process for academically publishing your Software: here

ABSTRACTING AND INDEXING

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AI Robotics Abstracts
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Neuroscience Citation Index
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Q. M. Jonathan Wu, University of Windsor, Windsor, Ontario, Canada
• Computer vision, • image processing, • neural networks, • deep learning, • pattern recognition

Wei Wu, Chinese Academy of Sciences Institute of Automation, Beijing, China

Yue Wu, Amazon Lab126, Sunnyvale, California, United States of America
Theoretical studies and applications of multimedia signal (audio/image/video) processing, pattern classification and recognition, deep learning and adversarial learning, especially in fields like deep learning algorithmic primitive, Design, text detection and recognition, face detection and recognition, image forensics and forgery detection, Semantic image segmentation and concept verification, fake news detection, image denoising and enhancement, image encryption, steganography and data hiding, chaotic systems, etc

Chang Xu, The University of Sydney, Sydney, New South Wales, Australia
Multi-label learning, Multi-view learning, Multi-task learning, Transfer learning, Adversarial machine learning

Min Xu, University of Technology Sydney, Broadway, Australia
• Multimedia content understanding, • indexing and retrieval, • Multimedia affective computing, • Social multimedia

Yong Xu, Guangdong University of Technology, Guangzhou, China
stability analysis, state estimation and synchronization for neural networks

Zenglin Xu, University of Electronics Science and Technology of China School of Computer Science and Engineering, Chengdu, Sichuan, China
Fields of specialization - Kernel learning, Gaussian process, Deep learning, Tensor analysis, Semi-supervised learning

Bo Yan, Fudan University, Shanghai, China
• Image Restoration • Image Enhancement • Image Retargeting

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Sparse coding, Computer vision, Multimedia, Machine learning, Video analytics

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Pattern recognition, Computer vision, Multi-media (image/video) processing and analysis, Machine learning, Data mining

Chenguang Yang, Swansea University, Swansea, United Kingdom

Guang Yang, Imperial College London, London, United Kingdom
Medical Image Analysis, Data Science, Machine Learning, Deep Learning, AI, Digital Healthcare

Rui Yang, University of Liverpool, Liverpool, United Kingdom
Machine learning

Tianbao Yang, The University of Iowa, Iowa City, Iowa, United States of America
large-scale optimization for machine learning, online learning and optimization, randomized algorithms for machine learning, learning from high-dimensional data, big data related topics, and deep learning

Xiaochen Yang, University of Glasgow, Glasgow, United Kingdom
distance metric learning, few-shot learning, hyperspectral image analysis

Xinsong Yang, Sichuan University, Chengdu, Sichuan, China
Neural network, synchronization, control, switched systems, complex networks, impulsive systems, multiagent systems

Xuebo Yang, Harbin Institute of Technology, Haerbin, China
Robust control, adaptive control, intelligent control, spacecraft and aircraft, robot control, trajectory optimization

Yimin Yang, Western University, Department of Electrical and Computer Engineering, London, Ontario, Canada
Machine learning, deep learning, shallow learning, unsupervised learning, sequential learning, ensemble learning, Pattern recognition, object category and image recognition, video recognition, hybrid system approximation, robotics system approximation, and fault-diagnosis, Data
analysis, dimension reduction, feature extraction, EEG-signal processing, data partition, information fusion, and optimization

Shen Yin, Harbin Institute of Technology, Haerbin, China
Yiming Ying, University at Albany, Albany, New York, United States of America

Statistical learning theory (e.g. Consistency, generalization bounds) Large-scale optimization for machine learning (e.g. Online learning, distributed learning) Multi-task learning Multiple kernel learning Metric learning Low-rank matrix factorization

Hui Yu, University of Portsmouth, Portsmouth, United Kingdom

Facial analysis and recognition, Visual tracking, human action recognition, Robot vision, 3D reconstruction and recognition, Eye gaze analysis

Jun Yu, Xiamen University, Xiamen, China
Zhu Liang Yu, South China University of Technology School of Automation Science and Engineering, Guangzhou, China

Brain Computer Interfaces, Brain signal processing, Machine learning, biomedical signal processing

Yuan Yuan, Northwestern Polytechnical University, Xian, China

Image Processing, Computer Vision, Remote Sensing Imagery, Hyperspectral Image Analysis, Machine Learning

Hui Yu, University of Portsmouth, Portsmouth, United Kingdom

Facial analysis and recognition, Visual tracking, human action recognition, Robot vision, 3D reconstruction and recognition, Eye gaze analysis

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Brain Computer Interfaces, Brain signal processing, Machine learning, biomedical signal processing

Yuan Yuan, Northwestern Polytechnical University, Xian, China

Image Processing, Computer Vision, Remote Sensing Imagery, Hyperspectral Image Analysis, Machine Learning

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Intelligent Data Analysis (Machine learning, Intelligent algorithm, Bioinformatics, Biomedical image processing, Neural networks) System Modeling (Time-series modeling, System identification, Biomedical modeling and computing, Healthcare information systems) Instrumentation and Measurement (Medical instruments, Power system, Wireless sensor networks)

Zhi-Hui Zhan, South China University of Technology, Guangzhou, China

• Evolutionary Computation (EC); • Evolutionary Algorithm (EA); • Swarm Intelligence (SI); • Particle Swarm Optimization (PSO); • Ant Colony Optimization (ACO); • Genetic Algorithm (GA); • Differential Evolution (DE)

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Isolation, failure prognosis, and fault tolerant control, Robotics, mechatronics, unmanned systems, electromechanics, and industrial electronics, Dynamic systems, design, modeling, system simulation, Distributed and cooperative systems, large-scale systems monitoring and control based on information processing and fusion, Smart systems, modeling, learning, and adaptation of systems to environment and users

Haijun H. Zhang, Harbin Institute of Technology Shenzhen School of Computer Science and Technology, Shenzhen, China

• Data mining • Clustering/classification • Machine learning • Dimensionality reduction • Document retrieval • Image segmentation/semantics • Recommender systems • Computational advertising

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Huaguang Zhang, Northeastern University, Shenyang, China
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neural networks, machine learning, data-driven modelling, process control, process optimisation, process monitoring

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Machine Learning

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Medical Image Analysis, Computer Aided Diagnosis, Segmentation, Deep Learning, Large-scale analysis

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Pattern Recognition, Machine Learning, Deep Learning, OCR

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Behavioral Data Science, Structural Equation Modeling, Missing Data Analysis, Non-normal Data Analysis, Network Analysis, Text Mining

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Adaptive dynamic programming, Reinforcement learning, Optimal control, Neural network-based control, Intelligent control, fault diagnosis and tolerant control, robot control.

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sans-serif; font-size: 10.5pt;“>Industrial data analytics, Process monitoring, Fault diagnosis, Soft sensor, Control performance monitoring and evaluation., data analysis, machine learning

Peilin Zhao, Tencent AI Lab, Shenzhen, China
• Machine Learning: Online Learning, Stochastic Optimization, Deep Learning, etc. • Applications: Multimedia Search, Computational Finance, Cybersecurity, Computational Biology, • Computer Vision, etc.

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Machine learning, Data mining

**Xiuzhuang Zhou**, Beijing University of Posts and Telecommunications, Beijing, China  

**Rui Zhu**, City University of London, London, United Kingdom  
**Xiaofeng Zhu**, Guangxi Normal University, Guilin, China  
Feature selection, subspace learning, sparse coding, multi-task learning, missing value imputation, cost-sensitive learning, hashing, medical image classification, spectral clustering

**Xiahai Zhuang**, Fudan University, School of Data Science, Shanghai, China  
Medical image analysis, Medical imaging, Bayesian deep learning, Super resolution

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