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武汉, 2025.5

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IEEE 驱动科技进步

IEEE Xplore 助力高效科研

IEEE 拥抱开放科学

通过 IEEE 多渠道加强科技交流

IEEE 驱动科技进步

IEEE的成立历史

1884 1912 1963 Present



AIEE
American Institute
of Electrical Engineers
美国电气工程师学会



IRE
Institute of Radio
Engineers
无线电工程师学会



The Institute of Electrical and Electronics Engineers
电气电子工程师学会

IEEE
140
1884 - 2024
YEARS

IEEE组织情况

- 非营利组织，全球最大的技术行业学会，成员遍布160多个国家/地区，会员超过46万人



- 300多个地方分会
- 2000多个专业委员会
- 100多个国家/地区的3000多个学生分会

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- IEEE Antennas and Propagation Society
- IEEE Broadcast Technology Society
- IEEE Circuits and Systems Society
- IEEE Communications Society
- IEEE Computational Intelligence Society
- IEEE Computer Society 最大
- IEEE Consumer Electronics Society
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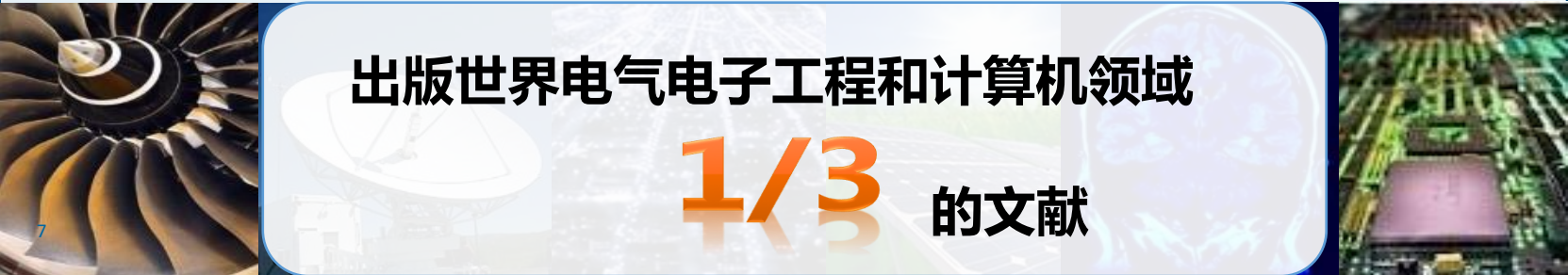
39个专业协会

IEEE Societies

IEEE涵盖各个科技工程领域

More than just electrical engineering & computer science

- Aerospace & Defense
- Automotive Engineering
- Biomedical Engineering
- Biometrics
- Circuits & Systems
- Cloud Computing
- Communications
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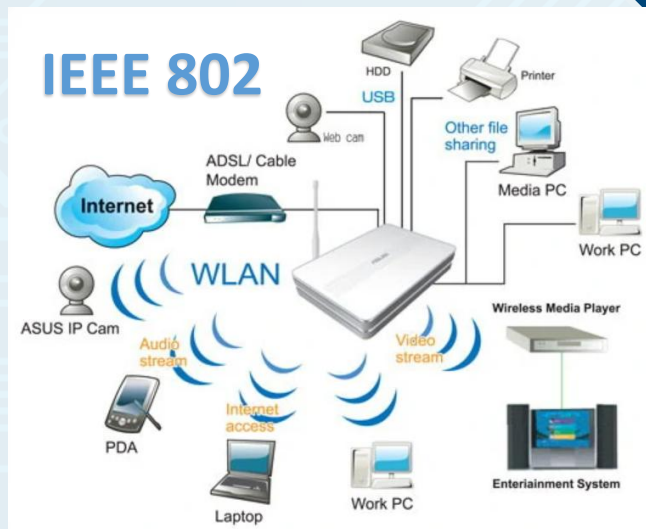
Mission 使命

通过标准活动推动技术合作和经济发展

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- Electromagnetic Compatibility
- Green Technology
- Ethernet/Wi-Fi
- Medical Device Communications
- Nanotechnology
- Organic Components

- Portable Battery Technology
- Power Electronics
- Power & Energy
- Radiation/Nuclear
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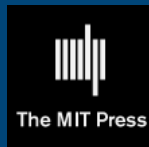
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- 这些电子图书由各领域的专家所著，包括著名的科学家，获奖作者及知名科研人员等，且大多具备雄厚的IEEE学会背景（如IEEE会士、IEEE编辑）；



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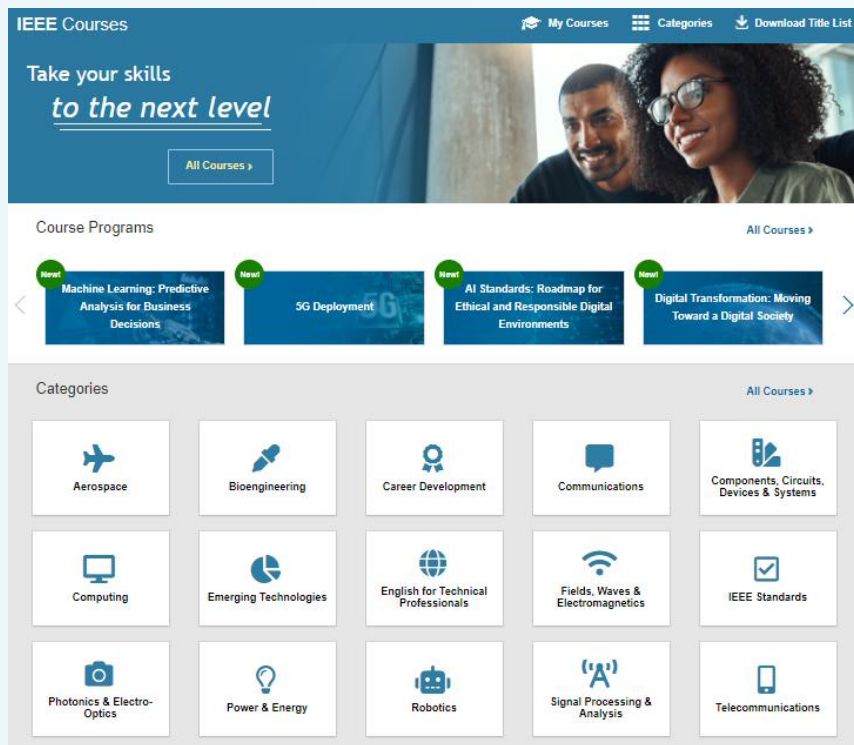


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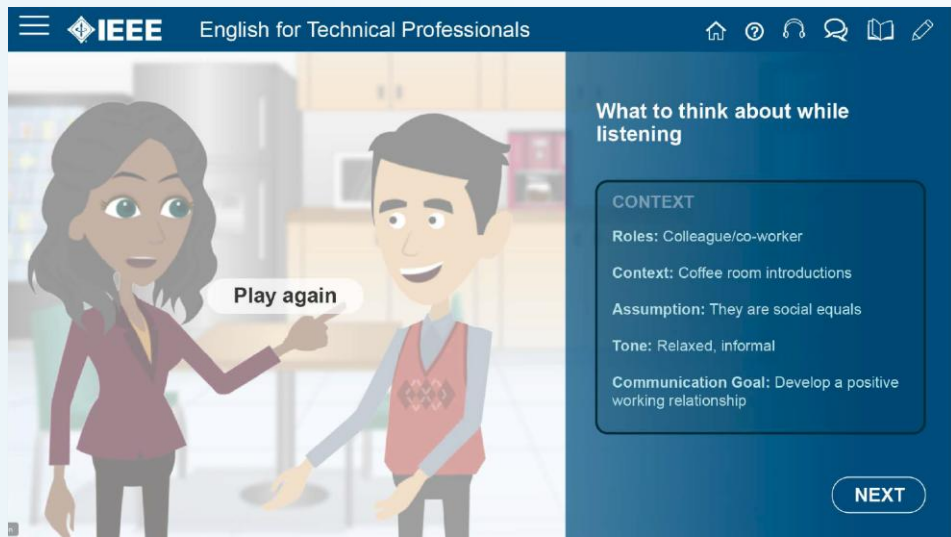
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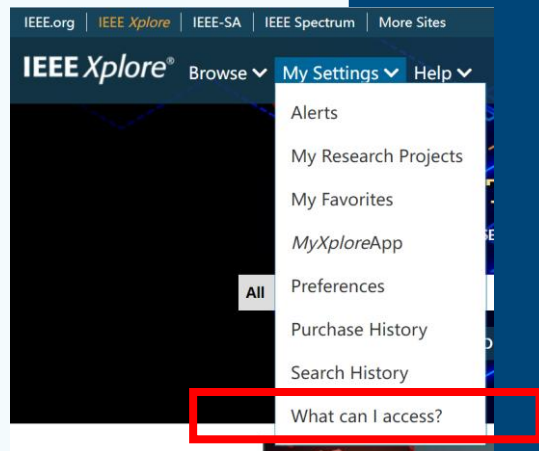


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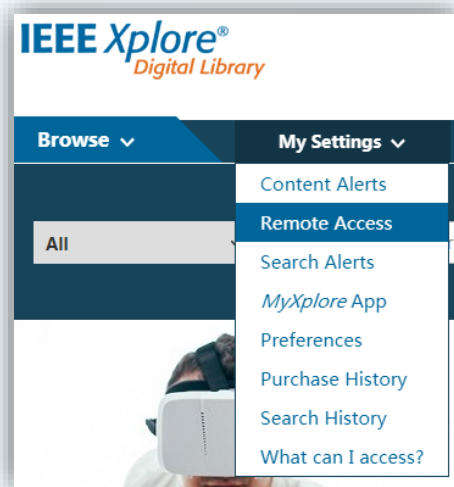
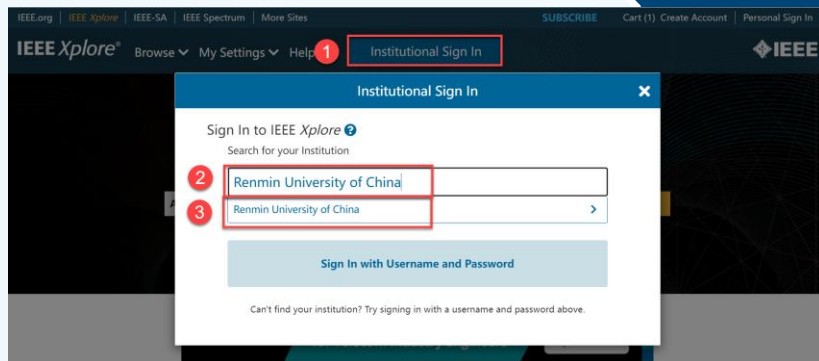
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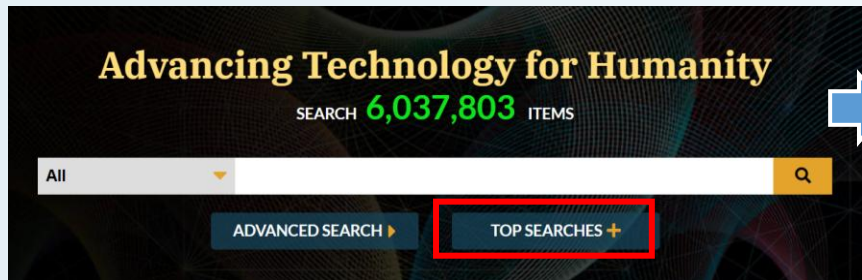


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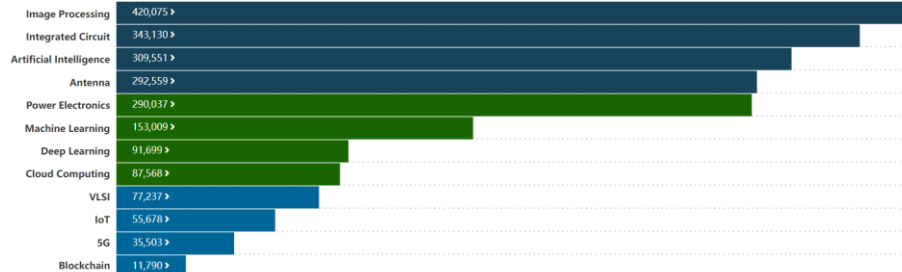
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Biography

Boxue Du (Senior Member, IEEE) received the M.E. degree in electrical engineering from Ibaraki University, Hitachi, Japan, 1993, and the Ph.D. degree from Tokyo University of Agriculture and Technology, Tokyo, Japan, in 1996. From 1996 to 2002, he was with Niigata Institute of Science and Technology, Niigata, Japan, where he was an Associate Professor. From 2000 to 2002, he was a Visiting Scientist at Niigata University, Niigata, Japan. Since 2002, he has been a Full Professor and the Director-Founder of the Institute of High Voltage, School of Electrical and Information Engineering, Tianjin University, Tianjin, China, where after several years as a Distinguished Professor, he is currently a Chair Professor and has been ranked the #1 Surfac... [Show More](#)

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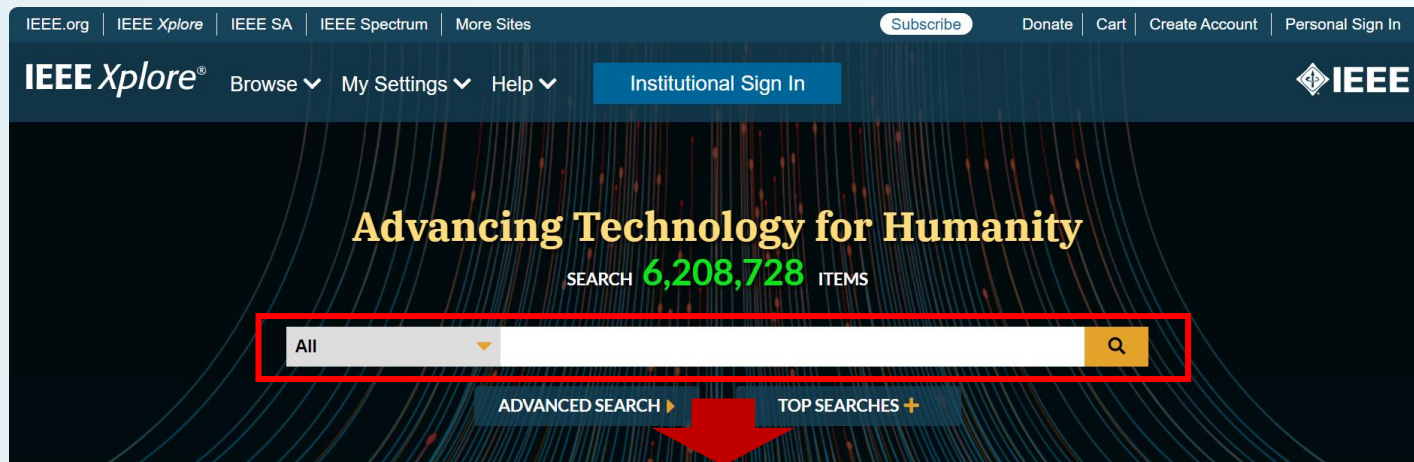
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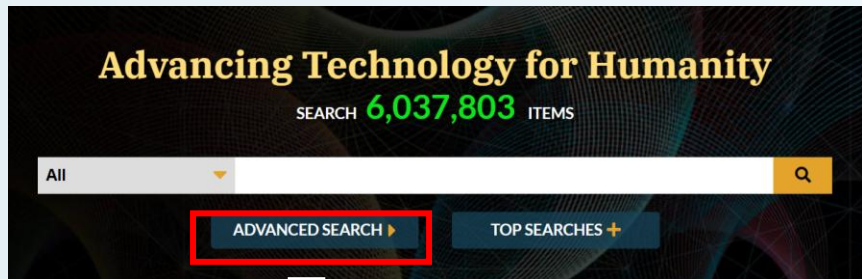
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☐ **Construction of Enterprise Business Management Analysis Framework in the** 

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☐ IEEE Access (20,116)
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☐ 2011 2nd International Conference on Artificial Intelligence, Management Science and Electronic Commerce (AIMSEC) (1,874)
☐ IEEE Transactions on Neural Networks and Learning Systems (1,724)
☐ IEEE Transactions on Neural Networks (1,625)
☐ IEEE Transactions on Cybernetics (1,148)
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☐ **A Voting-Mechanism based Ensemble Framework for Constraint Handling Techniques**


Guohua Wu; Xupeng Wen; Ling Wang; Witold Pedrycz; P. N. Suganthan
 IEEE Transactions on Evolutionary Computation
 Year: 2021 | Early Access Article | Publisher: IEEE

Abstract





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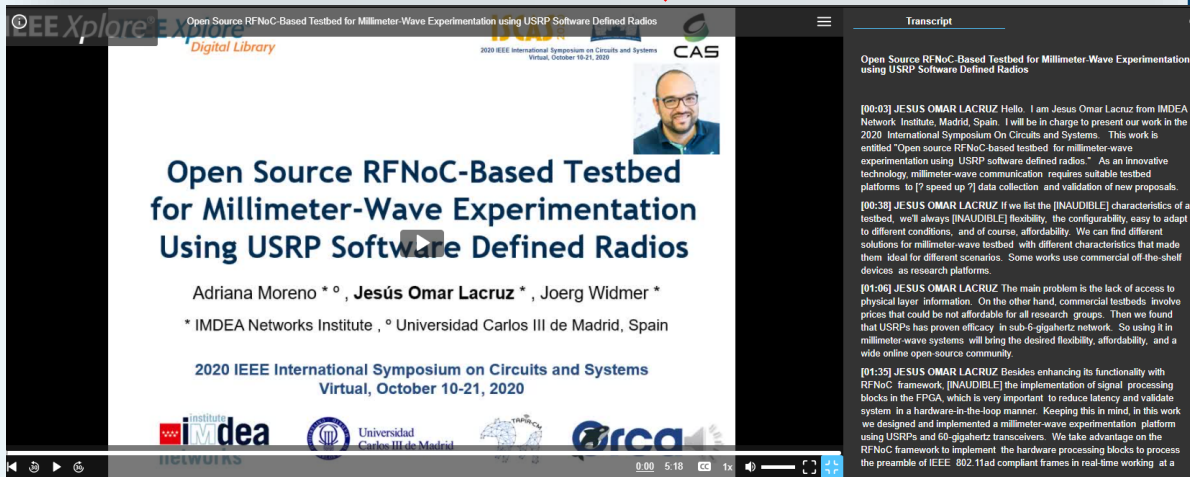
This is the supplementary file of the article “A Voting-Mechanism based Ensemble Framework for Constraint Handling Techniques” published in IEEE Transactions on Evolutionary Computation. This file contains two parts. One part includes the details of the 57 real-world constrained optimization problems, which are used in Section IV in the manuscript. Another part is the experimental results, including the best/mean/median values of the ten comparison algorithms on the 57 real-world constrained optimization problems, as the supplementary data of Table I and Table II in the manuscript.

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- ☐ **SR Latch: The Wrong Introduction to Digital Memory** 
- Abdulahdi Shoufan
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 **Video**

会议视频



Open Source RFNoC-Based Testbed for Millimeter-Wave Experimentation Using USRP Software Defined Radios

Adriana Moreno * , Jesús Omar Lacruz * , Joerg Widmer *

* IMDEA Networks Institute , * Universidad Carlos III de Madrid, Spain

2020 IEEE International Symposium on Circuits and Systems
Virtual, October 10-21, 2020

Transcript

Open Source RFNoC-Based Testbed for Millimeter-Wave Experimentation using USRP Software Defined Radios

[00:03] JESUS OMAR LACRUZ Hello I am Jesus Omar Lacruz from IMDEA Network Institute, Madrid, Spain. I will be in charge to present our work in the 2020 International Symposium On Circuits and Systems. This work is entitled "Open source RFNoC-based testbed for millimeter-wave experimentation using USRP software defined radios". As an innovative technology, millimeter-wave communication requires suitable testbed platforms to [?] speed up [?] data collection and validation of new proposals.

[00:38] JESUS OMAR LACRUZ If we list the [INAUDIBLE] characteristics of a testbed, we'll always [INAUDIBLE] flexibility, the configurability, easy to adapt to different conditions, and of course, affordability. We can find different solutions for millimeter-wave testbed with different characteristics that made them ideal for different scenarios. Some works use commercial off-the-shelf devices as research platforms.

[01:06] JESUS OMAR LACRUZ The main problem is the lack of access to physical layer information. On the other hand, commercial testbeds involve prices that could be not affordable for all research groups. Then we found that USRPs has proven efficacy in sub-6-gigahertz network. So using it in millimeter-wave systems will bring the desired flexibility, affordability, and a wide online open-source community.

[01:35] JESUS OMAR LACRUZ Besides enhancing its functionality with RFNoC framework, [INAUDIBLE] the implementation of signal processing blocks in the FPGA, which is very important to reduce latency and validate system in a hardware-in-the-loop manner. Keeping this in mind, in this work we designed and implemented a millimeter-wave experimentation platform using USRPs and 60-gigahertz transceivers. We take advantage on the RFNoC framework to implement the hardware processing blocks to process the preamble of IEEE 802.11ad compliant frames in real-time working at a

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☐ **Multi-Modal Remote Sensing Image Matching Considering Co-Occurrence Filter**


Yongxiang Yao; Yongjun Zhang; Yi Wan; Xinyi Liu; Xiaohu Yan; Jiayuan Li
 IEEE Transactions on Image Processing
 Year: 2022 | Volume: 31 | Journal Article | Publisher: IEEE

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Citation Author(s): Yongxiang Yao
Yongjun Zhang
 Submitted by: Yongxiang Yao
 Last updated: Fri, 03/11/2022 - 01:24
 DOI: 10.21227/2raa-sp12
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 33 Views
 Categories: Image Processing
 Keywords: Multi-modal Remote Sensing Image; Matching; Co-occurrence Filter; New image gradient

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ABSTRACT

This CoFSM dataset contains the supplemental material of TIP3157450 (Multimodal remote sensing image datasets). The CoFSM dataset contains six types of modal images (multi temporal-optical, infrared-optical, depth-optical, map-optical, SAR-optical and night-day). Each modal type includes 10 groups of images, and each set of images has corresponding ground truth points. These ground truth data are stored in the "Ground_truth" folder. For more details, see the following URL link <https://skyearth.org/publication/project/CoFSM/>

Instructions:

Introduction of the CoFSM dataset:

This CoFSM dataset contains the supplemental material of TIP3157450 (Multimodal remote sensing image datasets). The CoFSM dataset contains six types of modal images (multi temporal-optical, infrared-optical, depth-optical, map-optical, SAR-optical and night-day). Each modal type includes 10 groups of images, and each set of images has corresponding ground truth points. These ground truth data are stored in the "Ground_truth" folder.

CoFSM dataset of Multimodal remote sensing image

-from "Multi-modal Remote Sensing Image Matching Considering Co-occurrence Filter", to be published in IEEE Transactions on Image Processing.

Dataset introduction:

It contains 6 multi-modal data types:

1-->optical-optical include 10 sets of images;

DATASET FILES

- CoFSM dataset contains multi-modal images data CoFSM.zip (37.48 MB)

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A Novel Mean-Shift Algorithm for Data Clustering

Claude Cariou; Steven Le Moan; Kacem Chehdi

IEEE Access

Year: 2022 | Volume: 10 | Journal Article | Publisher: IEEE

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代码

Code & Datasets

CodeDataset

This article includes code hosted on Code Ocean, a computational reproducibility platform that allows users to view, modify, run, and download code included with IEEE Xplore articles. NOTE: A Code Ocean user account is required to access functionality in the capsule below.

Code: MATLAB Robust MeanShift clustering algorithm

Robust MeanShift clustering algorithm (Claude Cariou)

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Computer Science

Robust MeanShift clustering algorithm

Claude Cariou

A data clustering algorithm which mixes the classical Mean-Shift algorithm an its blurring version, and uses a nearest neighbor (NN) search. The only parameter is K, the number of NNs.

ClusteringData Miningmeanshift

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☐ Type-1 and Interval Type-2 Fuzzy Systems [AI- eXplained]

Dongrui Wu; Ruimin Peng; Jerry M. Mendel

IEEE Computational Intelligence Magazine

Year: 2023 | Volume: 18, Issue: 1 | Magazine Article | Publisher: IEEE

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Abstract

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沉浸互动模式



Try to drag the blue or green dot to change the membership interval of x .

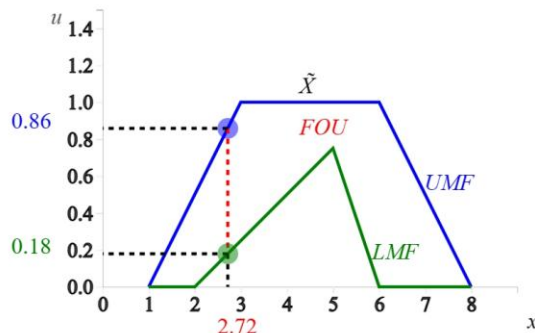


Figure 7:

Example of an IT2 fuzzy set. When the input $x = 2.72$, the membership interval is $[0.18, 0.86]$, represented by the red dashed line.

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☐ **How do we move towards true artificial intelligence**

Wei Liu; Guangda Zhuang; Xin Liu; Shaobo Hu; Ruilin He; Yuhu Wang

2021 IEEE 23rd Int Conf on High Perform

& Systems; 19th Int Conf on Smart C

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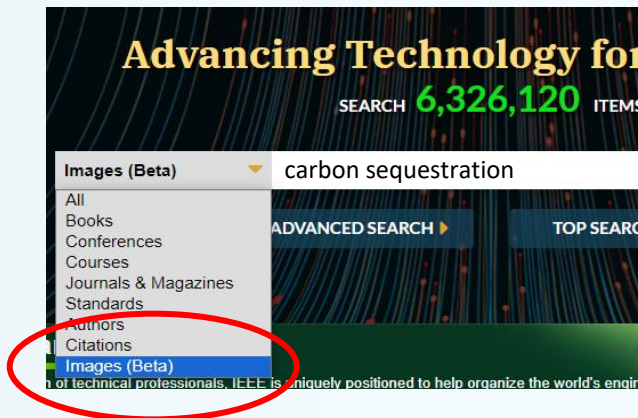


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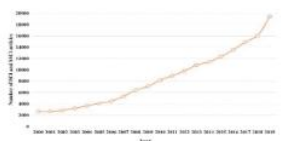
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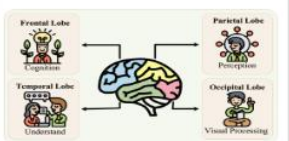
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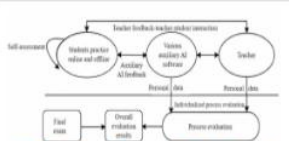
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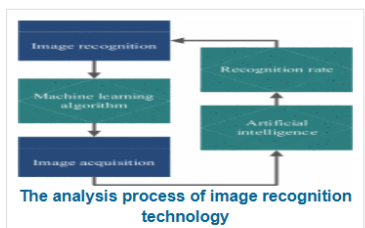
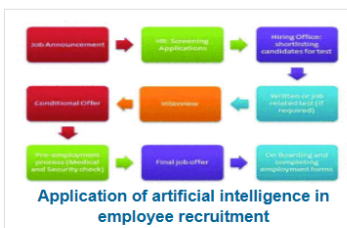
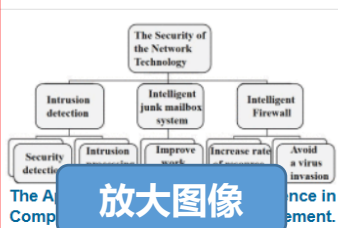
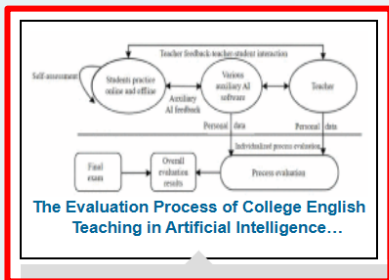


Application of artificial intelligence in employee recruitment



The analysis process of image recognition technology

Image Search (Beta)最新上线



放大图像



Research on College English Teaching Mode Based on Artificial Intelligence

Ma Yuan

2021



2021 International Conference on Big Data Analysis and Computer Science (BDACS)

Abstract

With the continuous development of the times, one of the major challenges facing college English in China is how to reduce or eliminate "dumb English". Over the years, with the continuous progress of artificial intelligence technology, it has been deeply explored in different fields and levels, such as the understanding of language knowledge or the cognition of images. However, how artificial inte...

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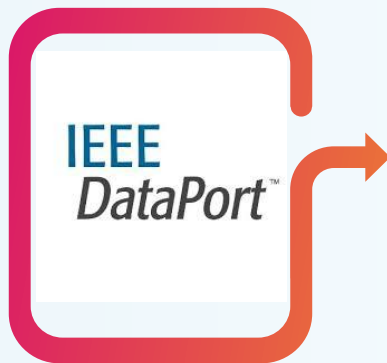
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Index Modulation Based Coordinate Interleaved Orthogonal Design for Secure Communications

Publisher: IEEE

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Burak Ozpoyraz; Ibrahim Yildirim; Ertugrul Basar All Authors

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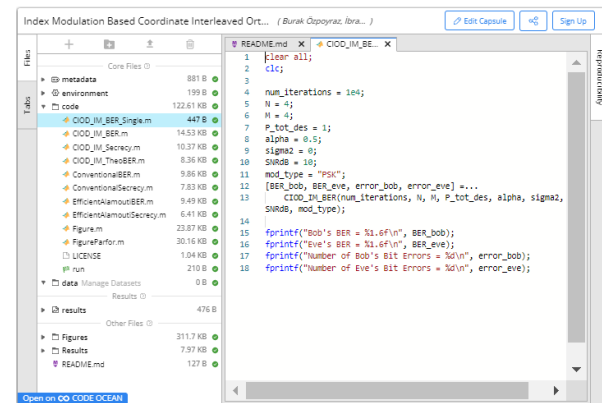
In this paper, we propose a physical layer security scheme that exploits a novel index modulation (IM) technique for coordinate interleaved orthogonal designs (CIOD). Utilizing the diversity gain of CIOD transmission, the proposed scheme, named CIOD-IM, provides an improved spectral efficiency by means of IM. In order to provide a satisfactory secrecy rate, we design a particular artificial noise matrix, which does not affect the performance of the legitimate receiver, while deteriorating the performance of the eavesdropper. We derive expressions of the ergodic secrecy rate and the theoretical bit error rate upper bound. In addition, we analyze the case of imperfect channel estimation by taking practical concerns into consideration. It is shown via computer simulations that the proposed scheme outperforms the existing IM-based schemes and might be a candidate for future secure communication systems.

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Code: MATLAB Index Modulation Based Coordinate Interleaved Orthogonal Designs



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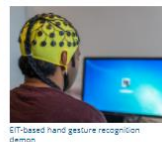
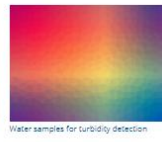
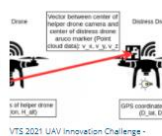
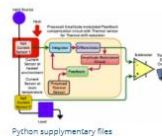
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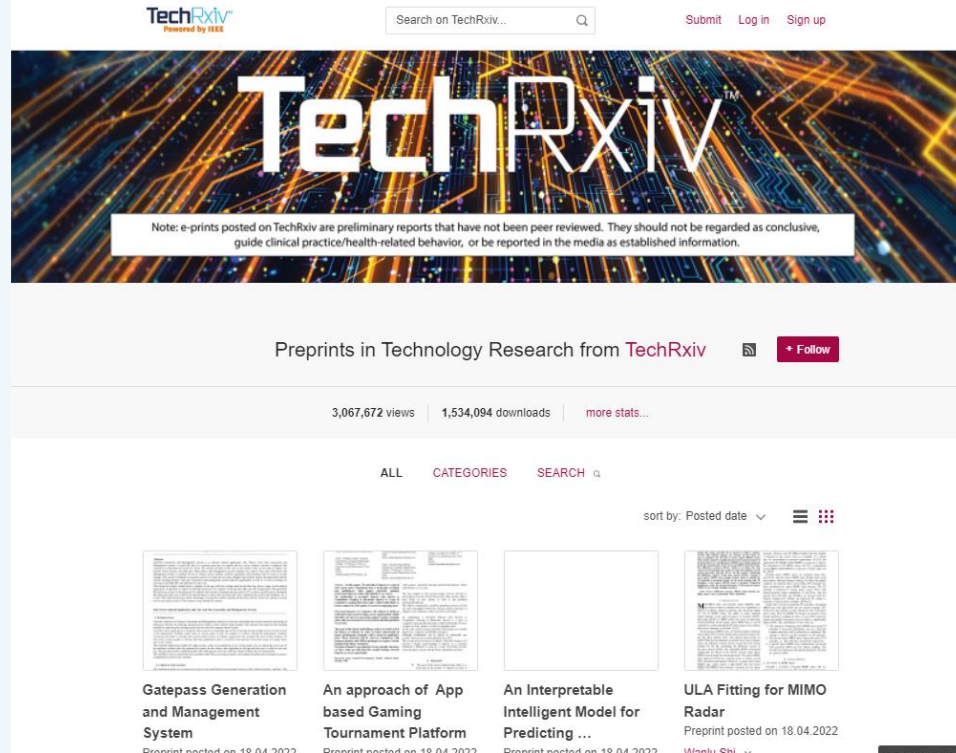


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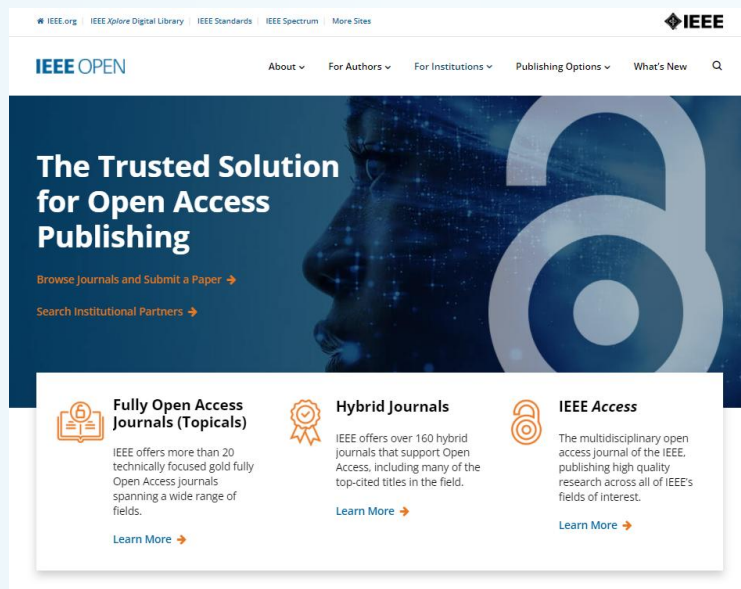
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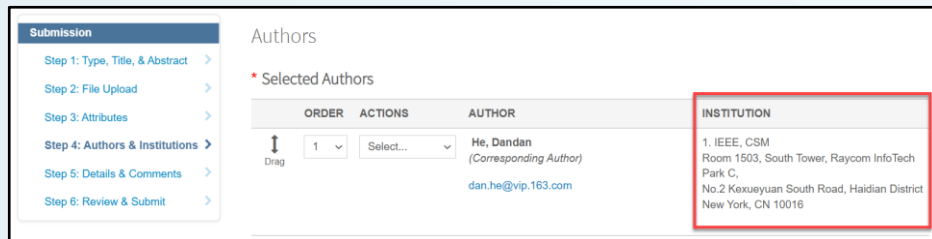
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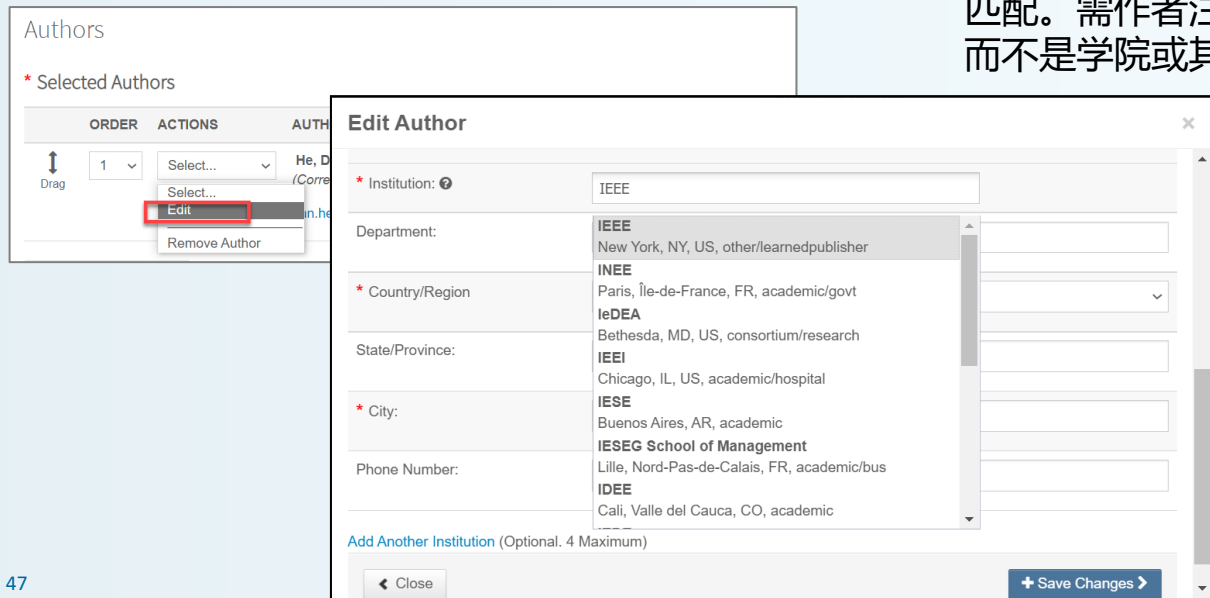
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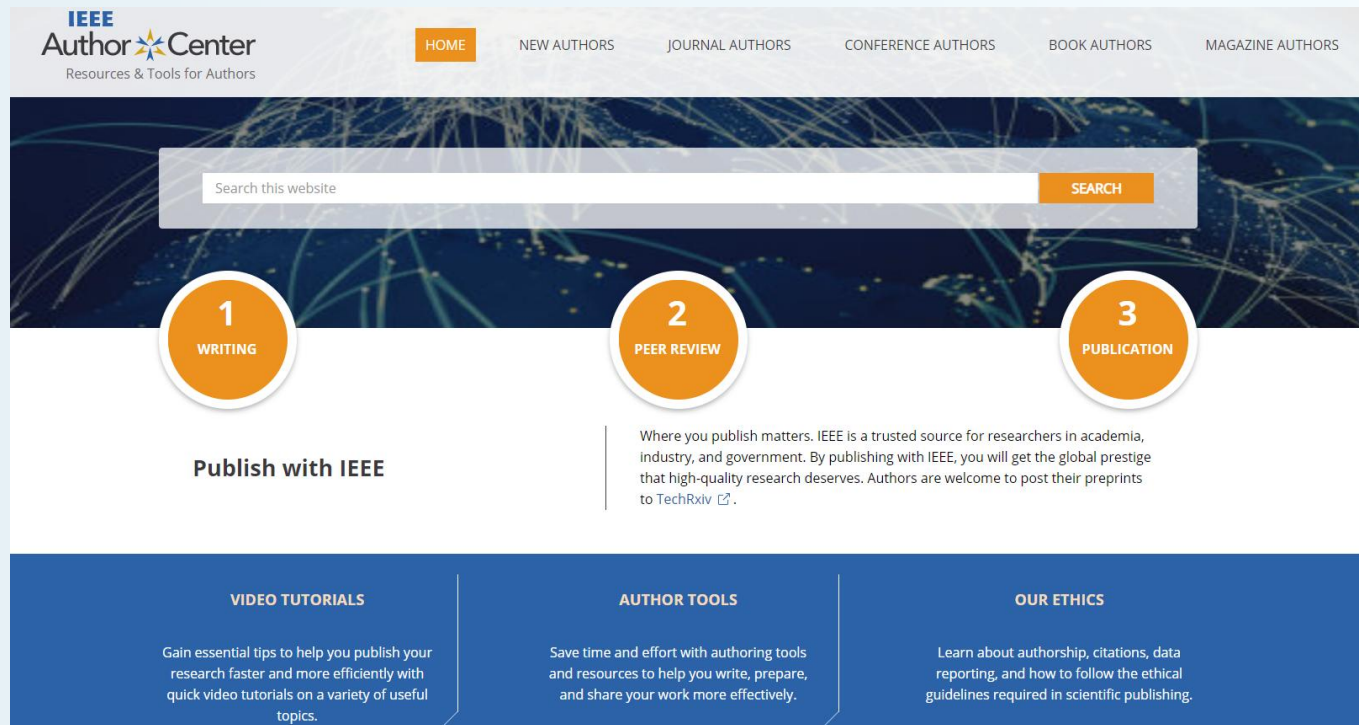
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