Novelty Assessment Report

Paper: GUIDE: Gated Uncertainty-Informed Disentangled Experts for Long-tailed Recognition
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Abstract

Long-Tailed Recognition (LTR) remains a significant challenge in deep learning. While multi-expert architectures are a prominent paradigm, we argue that their efficacy is fundamentally limited by a series of deeply entangled problems at the levels of representation, policy, and optimization. These entanglements induce homogeneity collapse among experts, suboptimal dynamic adjustments, and unstable meta-learning. In this paper, we introduce GUIDE, a novel framework conceived from the philosophy of Hierarchical Disentanglement. We systematically address these issues at three distinct levels. First, we disentangle expert representations and decisions through competitive specialization objectives to foster genuine diversity. Second, we disentangle policy-making from ambiguous signals by using online uncertainty decomposition to guide a dynamic expert refinement module, enabling a differentiated response to model ignorance versus data ambiguity. Third, we disentangle the optimization of the main task and the meta-policy via a two-timescale update mechanism, ensuring stable convergence. Extensive experiments on five challenging LTR benchmarks, including ImageNet-LT, iNaturalist 2018, CIFAR-100-LT, CIFAR-10-LT and Places-LT, demonstrate that GUIDE establishes a new state of the art, validating the efficacy of our disentanglement approach. Code is available at Supplement.

Core Task Landscape

This paper addresses: **Long-Tailed Recognition with Multi-Expert Architectures**

A total of **50 papers** were analyzed and organized into a taxonomy with **17 categories**.

Taxonomy Overview

The research landscape has been organized into the following main categories:

- **Multi-Expert Architecture Design and Specialization**
- **Test-Time Adaptation and Agnostic Distribution Handling**
- **Knowledge Distillation and Transfer for Imbalanced Learning**
- **Ensemble Learning Strategies for Class Imbalance**
- **Support Vector Machine Ensembles for Imbalance**
- **Data-Level and Hybrid Preprocessing with Ensemble**
- **Mixture-of-Experts and Gating Mechanisms**
- **Domain-Specific Applications of Multi-Expert and Ensemble Methods**

Complete Taxonomy Tree

- Long-Tailed Recognition with Multi-Expert Architectures Survey Taxonomy
- Multi-Expert Architecture Design and Specialization
  - Expert Disentanglement and Diversity Enhancement ★ (4 papers)
  - [0] GUIDE: Gated Uncertainty-Informed Disentangled Experts for Long-tailed Recognition (Anon et al., 2026) View paper
  - [2] Enhancing long-tailed classification via multi-strategy weighted experts with hybrid distillation (Wu Zeng, 2025) View paper
  - [11] MEKF: long-tailed visual recognition via multiple experts with knowledge fusion (Qian Zhang, 2025) View paper
  - [28] Enhancing Long-Tailed Recognition with Skill-specialized Experts and Bootstrap Latent Consistency (Jianfu Li, 2025) View paper
  - Collaborative and Nested Expert Learning (4 papers)
  - [4] Addressing imbalanced domain-incremental learning through dual-balance collaborative experts (Li Lan, 2025) View paper
  - [26] Dynamic collaborative learning with heterogeneous knowledge transfer for long-tailed visual recognition (Hao Zhou, 2025) View paper
  - [38] Nested collaborative learning for long-tailed visual recognition (Jun Li, 2022) View paper
  - [43] Collaborative Global-Local Structure Network With Knowledge Distillation for Imbalanced Data Classification (Feiyan Wu, 2024) View paper
  - Cascading and Parallel Expert Frameworks (3 papers)
  - [24] Long-tailed recognition of sar aerial view objects by cascading and paralleling experts (Cheng-Yen Yang, 2021) View paper
  - [27] Long-tailed SAR target recognition based on expert network and intraclass resampling (YingBing Liu, 2023) View paper
  - [39] Long-tailed Oracle Recognition Based on Attention and Multi-Expert Learning (Zhongyuan Yang, 2024) View paper
- Test-Time Adaptation and Agnostic Distribution Handling
  - Test-Agnostic Expert Aggregation (2 papers)
  - [7] Test-agnostic long-tailed recognition by test-time aggregating diverse experts with self-supervision (Yifan Zhang, 2021) View paper
  - [10] Self-supervised aggregation of diverse experts for test-agnostic long-tailed recognition (Zhang Yifan, 2022) View paper
- Knowledge Distillation and Transfer for Imbalanced Learning (3 papers)
  - [8] Complementary expert balanced learning for long-tail cross-modal retrieval (Peifang Liu, 2024) View paper

- [31] Uncertainty-Aware Multi-expert Knowledge Distillation for Imbalanced Disease Grading (Shuo Tong, 2025) View paper
- [46] Multimodal Learning to Improve Cardiac Late Mechanical Activation Detection from Cine MR Images (Jiarui Xing, 2024) View paper

- Ensemble Learning Strategies for Class Imbalance
  - Bagging and Random Forest Variants (2 papers)
  - [14] Func-Bagging: An Ensemble Learning Strategy for Improving the Performance of Heterogeneous Anomaly Detection Models (Ruinan Qiu, 2025) View paper
  - [30] Improved Ensemble-Based Approaches with Stacking for Imbalanced Medical Data Classification (Mouna Lamari, 2024) View paper
  - Boosting and Adaptive Weighting (3 papers)
  - [9] Solving the class imbalance problem using ensemble algorithm: application of screening for aortic dissection (Lijue Liu, 2022) View paper
  - [34] Rebalance Weights AdaBoost-SVM Model for Imbalanced Data (Chunyu Piao, 2023) View paper
  - [40] Highly Imbalanced Classification of Gout Using Data Resampling and Ensemble Method (Xiaonan Si, 2024) View paper
  - Stacking and Meta-Learning Ensembles (4 papers)
  - [12] Hypertension Prediction Using Stacked Ensemble Model from Imbalanced Clinical Data (Shah Muhammad Azmat Ullah, 2024) View paper
  - [42] A stacking ensemble model with SMOTE for improved imbalanced classification on credit data (Nur Alamsyah, 2024) View paper
  - [44] A neighborhood undersampling stacked ensemble (NUS-SE) in imbalanced classification (Zian Seng, 2021) View paper
  - [47] An empirical evaluation of stacked ensembles with different meta-learners in imbalanced classification (Seng Zian, 2021) View paper
  - Hybrid and Multi-Strategy Ensemble Integration (4 papers)
  - [6] A review of ensemble learning and data augmentation models for class imbalanced problems: combination, implementation and evaluation (Azal Ahmad Khan, 2023) View paper
  - [35] Diversity analysis on imbalanced data sets by using ensemble models (Shuo Wang, 2009) View paper
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  - [41] DUEN: Dynamic ensemble handling class imbalance in network intrusion detection (Huajuan Ren, 2023) View paper
- Support Vector Machine Ensembles for Imbalance (2 papers)
  - [5] SVM ensemble training for imbalanced data classification using multi-objective optimization techniques (Joanna Grzyb, 2023) View paper
  - [13] Imbalanced classification using support vector machine ensemble (Tian Jiang, 2011) View paper
- Data-Level and Hybrid Preprocessing with Ensemble (3 papers)
  - [16] Metaheuristic-driven space partitioning and ensemble learning for imbalanced classification (Saeed Kamro, 2024) View paper
  - [18] An ensemble imbalanced classification method based on model dynamic selection driven by data partition hybrid sampling (Xin Gao, 2020) View paper
  - [50] Class imbalance ensemble learning based on the margin theory (Wei Feng, 2018) View paper
- Mixture-of-Experts and Gating Mechanisms (2 papers)
  - [21] MFBLS: A Mixture-of-Experts-Based Fuzzy Broad Learning System for Tackling Imbalanced Datasets (Jing Wang, 2025) View paper
  - [22] Vm-Swinunet: attention-guided deep placental vessel network with mixture-of-experts for medical image segmentation (Yumna Memon, 2025) View paper
- Domain-Specific Applications of Multi-Expert and Ensemble Methods
  - Medical and Healthcare Applications (4 papers)
  - [19] Photoplethysmography-based non-invasive blood pressure monitoring via ensemble model and imbalanced dataset processing (Qianyu Liu, 2024) View paper
  - [20] Echomen: Combating data imbalance in ejection fraction regression via multi-expert network (Song Lai, 2024) View paper
  - [29] Optimal modeling of anti-breast cancer candidate drugs screening based on multi-model ensemble learning with imbalanced data. (Juan Zhou, 2023) View paper
  - [49] SleepEGAN: A GAN-enhanced Ensemble Deep Learning Model for Imbalanced Classification of Sleep Stages (Xuewei Cheng, 2023) View paper
  - Remote Sensing and Geospatial Analysis (3 papers)
  - [15] Multi-expert contrastive learning for remote sensing long-tailed image classification (Lei Zhang, 2025) View paper
  - [25] Land cover mapping from multiple complementary experts under heavy class imbalance (Lu Xiaolong, 2024) View paper
  - [32] MIAYOLO: Multiexpert and Intraclass Aggregation-Assisted Suburban Building Detection in Unmanned Aerial Vehicle Imagery (Dong Ren, 2024) View paper
  - Network Traffic and Cybersecurity (1 papers)
  - [1] Class Imbalance in Network Traffic Classification: An Adaptive Weight Ensemble-of-Ensemble Learning Method (Mahmoud Abbasi, 2025) View paper
  - Specialized Recognition Tasks (4 papers)
  - [23] Emotion Classification in Private Social Media Using Machine Learning Methods: Case Study of My Tel-U App (Hanifan Nurul Haq, 2024) View paper
  - [33] Optimizing Supernova Classification with Interpretable Machine Learning Models (Garg Anurag, 2025) View paper
  - [45] Tackling the long-tailed challenge of greenhouse tomato cultivation cycles recognition: a sub-group guided, multi-expert lightweight framework. (Ruochen Zhang, 2025) View paper
  - [48] MicroalgaeNet: Enhancing recognition of long-tailed marine microalgae images through multi-expert networks and feature compression (Keyi Chen, 2025) View paper
  - Multi-Class and Multi-Modal Imbalanced Classification (3 papers)
  - [3] An adaptive multi-class imbalanced classification framework based on ensemble methods and deep network (Xuezheng Jiang, 2023) View paper
  - [17] An interpretable dynamic ensemble selection multiclass imbalance approach with ensemble imbalance learning for predicting road crash injury severity (Kamran Aziz, 2025) View paper
  - [37] Cost-sensitive decision tree ensembles for effective imbalanced classification (B. Krawczyk, 2014) View paper

Narrative

Core task: long-tailed recognition with multi-expert architectures. The field addresses the challenge of learning from highly imbalanced data distributions where a few head classes dominate while many tail classes contain scarce examples. The taxonomy reveals several complementary research directions. Multi-Expert Architecture Design and Specialization focuses on building diverse expert networks that can specialize on different parts of the class distribution, often employing mechanisms to enhance expert disentanglement and diversity. Test-Time Adaptation and Agnostic Distribution Handling explores methods that adjust predictions dynamically when deployment distributions differ from training, while Knowledge Distillation and Transfer for Imbalanced Learning leverages teacher-student frameworks to propagate knowledge from head to tail classes. Ensemble Learning Strategies for Class Imbalance and Support Vector Machine Ensembles for Imbalance investigate classical ensemble techniques adapted for skewed distributions, and Data-Level and Hybrid Preprocessing with Ensemble combines resampling or augmentation with ensemble methods. Mixture-of-Experts and Gating Mechanisms examines learnable routing strategies, and Domain-Specific Applications demonstrates these techniques across medical imaging, remote sensing, and other specialized domains.

Recent work has intensified around expert specialization and collaborative learning. A dense branch explores how to train multiple experts that focus on complementary subsets of classes—some targeting head classes, others emphasizing tail performance—while maintaining diversity to avoid redundant predictions. For instance, Dual-Balance Collaborative Experts[4] and Multi-Strategy Weighted Experts[2] propose balancing mechanisms and weighted aggregation to coordinate expert contributions. GUIDE[0] sits within the Expert Disentanglement and Diversity Enhancement cluster, emphasizing techniques that encourage each expert to capture distinct feature representations and reduce overlap. This contrasts with approaches like MEKF[11] and Skill-Specialized Experts[28], which may prioritize skill-based partitioning or knowledge fusion strategies. A key open question across these branches is how to optimally balance expert specialization—ensuring sufficient diversity—against the need for stable, generalizable ensemble predictions, particularly when tail classes offer minimal supervision.

Related Works in Same Category

The following **3 sibling papers** share the same taxonomy leaf node with the original paper:

1. Enhancing long-tailed classification via multi-strategy weighted experts with hybrid distillation

Authors: Wu Zeng, Zheng-ying Xiao | **Year/Venue**: 2025 | **URL**: View paper

Abstract

â¦ Second, we introduce multi-strategy weighted multi-expert to â¦ detection performance of models in long-tailed recognition. â¦ experiments using Pytorch architecture and two NVIDIA RTX â¦

Relationship Analysis

Both papers belong to the Expert Disentanglement and Diversity Enhancement category, focusing on multi-expert architectures for long-tailed recognition. They share the goal of improving expert diversity and specialization through competitive mechanisms, with GUIDE using competitive specialization objectives and uncertainty-guided gating while the candidate paper employs multi-strategy weighted experts with hybrid distillation. The key difference is that GUIDE addresses a hierarchical cascade of entanglements (representation, policy, and optimization levels) with uncertainty decomposition and two-timescale updates, whereas the candidate paper focuses on multi-strategy weighting and distillation-based approaches to expert coordination.

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2. MEKF: long-tailed visual recognition via multiple experts with knowledge fusion

Authors: Qian Zhang, Chenghao Ji, Mingwen Shao, Liang Hong, Hong Liang | **Year/Venue**: 2025 | **URL**: View paper

Abstract

â¦ , we propose a novel multi-expert ensemble method to address long-tailed visual recognition tasks. The main â¦ We present the overall architecture of our approach as shown in Fig. 2. â¦

Relationship Analysis

Both papers belong to the Expert Disentanglement and Diversity Enhancement category, focusing on multi-expert architectures for long-tailed recognition. While GUIDE enforces expert diversity through competitive specialization objectives (feature decorrelation and predictive divergence maximization) combined with uncertainty-guided gating, MEKF appears to address expert diversity through knowledge fusion mechanisms across multiple experts. The key difference lies in GUIDE's hierarchical disentanglement approach that systematically addresses representation, policy, and optimization entanglements, whereas MEKF focuses on knowledge fusion strategies to combine expert outputs.

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3. Enhancing Long-Tailed Recognition with Skill-specialized Experts and Bootstrap Latent Consistency

Authors: Jianfu Li, Yang Xue | **Year/Venue**: 2025 • IEEE International Joint Conference on Neural Network | **URL**: View paper

Abstract

Long-tailed recognition tasks face the critical challenge of extreme data imbalance, where overrepresented head categories dominate, while tail categories suffer from severe underrepresentation. This imbalance hinders the modelâ□s ability to generalize to tail categories, a key bottleneck in real-world applications. Existing approaches, such as resampling strategies or loss function adjustments, often fail to balance the trade-off between head and tail categories. To tackle these challenges, we...

Relationship Analysis

Both papers belong to the Expert Disentanglement and Diversity Enhancement category, employing multi-expert architectures to address long-tailed recognition through enforced expert specialization. While GUIDE focuses on hierarchical disentanglement across representation, policy, and optimization levels using competitive specialization and uncertainty-guided gating, SELA-Net emphasizes skill-specialized experts with logit adjustment and Mixup combined with bootstrap latent consistency for layer-wise feature alignment. The key difference lies in GUIDE's systematic three-level disentanglement approach with uncertainty decomposition versus SELA-Net's focus on category-specific skill specialization with adaptive layer-wise consistency.

Contributions Analysis

Overall novelty summary. The paper introduces GUIDE, a framework addressing long-tailed recognition through hierarchical disentanglement at representation, policy, and optimization levels. It resides in the 'Expert Disentanglement and Diversity Enhancement' leaf, which contains four papers total (including GUIDE). This leaf sits within the broader 'Multi-Expert Architecture Design and Specialization' branch, indicating a moderately populated research direction focused on fostering expert diversity through competitive specialization and uncertainty-informed mechanisms. The taxonomy reveals this is an active but not overcrowded area, with sibling leaves exploring collaborative learning and cascading frameworks.

The taxonomy structure shows GUIDE's leaf neighbors include 'Collaborative and Nested Expert Learning' (four papers) and 'Cascading and Parallel Expert Frameworks' (three papers), both emphasizing coordination rather than disentanglement. Nearby branches address test-time adaptation, knowledge distillation, and ensemble strategies, suggesting the field balances architectural innovation with

training-time and deployment-time solutions. GUIDE's emphasis on disentangling representation, policy, and optimization distinguishes it from collaborative methods that prioritize knowledge transfer or nested structures, and from cascading designs that stage refinement across head-tail boundaries.

Among fifteen candidates examined, no contribution was clearly refuted. The first contribution (hierarchical entanglement identification) examined three candidates with zero refutations; the second (GUIDE framework with three-level disentanglement) examined two candidates with zero refutations; the third (state-of-the-art empirical results) examined ten candidates with zero refutations. This limited search scope—fifteen papers from semantic retrieval—suggests the specific combination of representation, policy, and optimization disentanglement may not have direct precedents in the examined literature, though the search does not cover the entire field comprehensively.

Based on top-fifteen semantic matches and the taxonomy context, GUIDE appears to occupy a distinct position within expert disentanglement research. The absence of refutable prior work in this limited sample, combined with its placement in a moderately populated leaf, suggests the hierarchical disentanglement philosophy may offer a novel angle. However, the search scope remains narrow, and broader literature beyond these candidates could reveal closer precedents or overlapping ideas not captured here.

This paper presents **3 main contributions**, each analyzed against relevant prior work:

Contribution 1: Identification of hierarchical entanglement problems in long-tailed recognition

Description: The authors identify three interconnected entanglement problems in multi-expert long-tailed recognition systems: representation-decision entanglement causing homogeneity collapse, cause-symptom entanglement in adaptive policies, and learning-meta-learning entanglement in optimization. They propose GUIDE as a unified framework to address these issues hierarchically.

This contribution was assessed against **3 related papers** from the literature. Papers with potential prior art are analyzed in detail with textual evidence; others receive brief assessments.

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1. Ecmee: Expert Constrained Multi-Expert Ensembles with Category Entropy Minimization for Long-Tailed Visual Recognition

URL: View paper

Brief Assessment

Ecmee[53] focuses on expert ensemble methods for long-tailed visual recognition but does not address the specific hierarchical entanglement problems (representation-decision, cause-symptom, learning-meta-learning) identified in the original paper. The candidate paper's full text context is not available for detailed comparison.

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2. Multiâ□□Expert Dynamic Gating and Feature Decoupling Algorithm for Longâ□□Tail Image Classification

URL: View paper

Brief Assessment

Multi-Expert Dynamic Gating[51] focuses on uniform enhanced sampling and feature decoupling for long-tailed classification but does not identify or address the hierarchical entanglement problems (representation-decision, cause-symptom, learning-meta-learning) that are central to the original paper's contribution.

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3. CDC: Enhancing Scene Graph Generation for IoST-Driven Social Behavioral Modeling With Cooperative Dual Classifier

URL: View paper

Brief Assessment

CDC[52] addresses long-tailed scene graph generation using cooperative dual classifiers for predicate classification, not multi-expert long-tailed recognition systems. The paper does not discuss representation-decision entanglement, cause-symptom entanglement, or learning-meta-learning entanglement in the context proposed by the original work.

Contribution 2: GUIDE framework with three-level disentanglement mechanisms

Description: The authors design GUIDE with three synergistic components: competitive specialization objectives for expert diversity at the representation level, uncertainty decomposition (epistemic versus aleatoric) to guide dynamic expert refinement at the policy level, and two-timescale stochastic approximation for stable optimization at the meta-learning level.

This contribution was assessed against **2 related papers** from the literature. Papers with potential prior art are analyzed in detail with textual evidence; others receive brief assessments.

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1. Divide, Weight, and Route: Difficulty-Aware Optimization with Dynamic Expert Fusion for Long-tailed Recognition

URL: View paper

Brief Assessment

Divide Weight Route[54] focuses on difficulty-aware optimization with mixture-of-experts routing for long-tailed recognition, but does not employ the specific three-level disentanglement approach (competitive specialization, epistemic/aleatoric uncertainty decomposition, two-timescale optimization) that characterizes GUIDE's hierarchical framework.

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2. Uncertainty-Aware Multi-expert Knowledge Distillation for Imbalanced Disease Grading

URL: View paper

Brief Assessment

Uncertainty-Aware Multi-Expert[31] focuses on multi-expert knowledge distillation for medical image grading with class imbalance, not on the hierarchical disentanglement of representation, policy, and optimization in long-tailed recognition frameworks.

Contribution 3: State-of-the-art empirical results on five long-tailed benchmarks

Description: The authors demonstrate that GUIDE achieves new state-of-the-art performance across five major long-tailed recognition benchmarks, with particularly strong improvements on few-shot classes, validating the effectiveness of their hierarchical disentanglement approach.

This contribution was assessed against **10 related papers** from the literature. Papers with potential prior art are analyzed in detail with textual evidence; others receive brief assessments.

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1. DiffuLT: Diffusion for Long-tail Recognition Without External Knowledge

URL: View paper

Brief Assessment

DiffuLT[60] focuses on a fundamentally different approach (diffusion-based data generation without external knowledge) rather than multi-expert architectures with hierarchical disentanglement. While both achieve strong results on long-tailed benchmarks, they represent distinct methodological paradigms and do not challenge each other's novelty claims.

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2. Feature channel interaction long-tailed image classification model based on dual attention

URL: View paper

Brief Assessment

Feature Channel Interaction[62] focuses on dual attention mechanisms for feature channel interaction in long-tailed image classification. The candidate's extremely limited context does not provide sufficient information about benchmark results or methodological approaches to challenge the original paper's claims of achieving state-of-the-art performance across five major benchmarks with hierarchical disentanglement.

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3. A multimodal visualâ□□language foundation model for computational ophthalmology

URL: View paper

Brief Assessment

Multimodal Visual-Language Foundation[63] focuses on ophthalmology disease classification across multiple imaging modalities, not general long-tailed recognition benchmarks. The domains and tasks are fundamentally different.

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4. A survey of multi-label text classification under few-shot scenarios

URL: View paper

Brief Assessment

Multi-Label Few-Shot Survey[58] is a survey paper on multi-label text classification under few-shot scenarios, focusing on NLP tasks rather than long-tailed visual recognition benchmarks. It does not present empirical results on the same benchmarks (ImageNet-LT, iNaturalist 2018, CIFAR-100-LT, CIFAR-10-LT, Places-LT) or challenge the novelty of GUIDE's state-of-the-art performance claims.

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5. Open long-tailed recognition in a dynamic world

URL: View paper

Brief Assessment

Open Long-Tailed Recognition[61] addresses open-set recognition with unseen classes in long-tailed settings, while the original paper focuses on closed-world long-tailed recognition with multi-expert architectures. The candidate evaluates on different benchmarks (ImageNet-OLTR, Places-OLTR, MS1M-OLTR) and different problem formulations, making direct comparison of state-of-the-art claims inappropriate.

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6. Mitigating long tail effect in recommendations using few shot learning technique

URL: View paper

Brief Assessment

Few Shot Recommendations[64] addresses long-tail effects in recommendation systems using few-shot learning, not long-tailed visual recognition benchmarks. The domains and problem formulations are fundamentally different.

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7. Large-scale long-tailed recognition in an open world

URL: View paper

Brief Assessment

Large-Scale Long-Tailed[57] addresses open long-tailed recognition (OLTR) which integrates open-set recognition with long-tailed learning, whereas the original paper focuses on closed-world long-tailed recognition with multi-expert architectures. The candidate's benchmarks and problem formulation differ fundamentally from the original's five closed-world benchmarks (ImageNet-LT, iNaturalist 2018, CIFAR-100-LT, CIFAR-10-LT, Places-LT).

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8. Ace: Ally complementary experts for solving long-tailed recognition in one-shot

URL: View paper

Brief Assessment

Ace[55] focuses on one-stage long-tailed recognition with a multi-expert architecture using complementary data splits, while GUIDE addresses hierarchical disentanglement across representation, policy, and optimization levels. The benchmarks and technical approaches differ substantially.

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9. FSID: a novel approach to human activity recognition using few-shot weight imprinting

URL: View paper

Brief Assessment

FSID[56] addresses few-shot human activity recognition from sensor data, not long-tailed visual recognition benchmarks. The candidate focuses on healthcare applications with limited labeled data rather than class imbalance in large-scale image datasets.

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10. Low-shot learning and class imbalance: a survey

URL: View paper

Brief Assessment

Low-Shot Learning Survey[59] is a survey paper reviewing literature on low-shot learning and class imbalance from 2020-2023. It does not present experimental results on long-tailed recognition benchmarks, nor does it propose methods that could refute the original paper's empirical achievements on ImageNet-LT, iNaturalist 2018, CIFAR-100-LT, CIFAR-10-LT, and Places-LT.

Appendix: Text Similarity Detection

No high-similarity text segments were detected across any compared papers.

References

- [0] GUIDE: Gated Uncertainty-Informed Disentangled Experts for Long-tailed Recognition View paper
- [1] Class Imbalance in Network Traffic Classification: An Adaptive Weight Ensemble-of-Ensemble Learning Method View paper
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