

目 次

泛在操作系统理论、技术与开源生态构建专题

我国巨型星座操作系统发展研究 .....	449
于登云, 李宗凌, 宋桂萍, 汪路元	
面向泛在操作系统的结构化存储 .....	461
范晓鹏, 阎松, 翁楚良	
BrickOS: 面向异构硬件资源的积木式内核 .....	491
古金宇, 李浩, 夏虞斌, 管海兵, 丁佐华, 赵永望, 陈海波	

评述

面向外包服务的可验证技术研究进展 .....	514
孙奕, 杨帆, 陈性元, 杜学绘, 林玮	

论文

联邦学习在高度数据异构场景下的泛化鲁棒性增强 .....	566
万伟, 胡胜山, 陆建荣, 李明慧, 周子洪, 金海	
一种基于动态可寻址会话的服务器无感知计算 .....	582
李子俊, 赵一龙, 陈全, 过敏意	
基于混合比例估计的标签噪声学习方法 .....	603
郑庆华, 曹书植, 阮建飞, 赵锐, 董博	
稳健选择伪标注的混合式半监督学习 .....	623
郭兰哲, 李宇峰	
深度 ReLU 神经网络的万有一致性 .....	638
刘霞, 王迪	
分心感知的伪装物体分割 .....	653
梅海洋, 杨鑫, 周运铎, 季葛鹏, 魏小鹏, 范登平	
基于时空层级查询的指代视频目标分割 .....	674
兰猛, 张乐飞, 杜博, 张良培	
具有非协同同步长的噪声鲁棒分布式资源分配算法 .....	692
吴温文, 朱善迎, 刘帅, 关新平	
高阶网络牵制控制中单纯形的选择 .....	708
周进, 李博, 陆君安, 史定华	

## Contents

### **Theories, Techniques and Open Source Ecosystem Construction for Ubiquitous Operating Systems**

- Development research of operating system for mega-constellation in China..... 449  
Dengyun YU, Zongling LI, Guiping SONG & Luyuan WANG
- Structured storage for ubiquitous operating systems ..... 461  
Xiaopeng FAN, Song YAN & Chuliang WENG
- BrickOS: specialized kernels for heterogeneous hardware resources ..... 491  
Jinyu GU, Hao LI, Yubin XIA, Haibing GUAN, Zuohua DING, Yongwang ZHAO & Haibo CHEN

### **REVIEW**

- Research progress of verifiable technologies for outsourcing services ..... 514  
Yi SUN, Fan YANG, Xingyuan CHEN, Xuehui DU & Wei LIN

### **RESEARCH PAPER**

- Enhancing generalization robustness of federated learning in highly heterogeneous environments..... 566  
Wei WAN, Shengshan HU, Jianrong LU, Minghui LI, Ziqi ZHOU & Hai JIN
- Serverless computing based on dynamic-addressable session ..... 582  
Zijun LI, Yilong ZHAO, Quan CHEN & Minyi GUO
- Label-noise learning via mixture proportion estimation ..... 603  
Qinghua ZHENG, Shuzhi CAO, Jianfei RUAN, Rui ZHAO & Bo DONG
- Robust pseudo-label selection for holistic semi-supervised learning ..... 623  
Lanzhe GUO & Yufeng LI
- Universal consistency of deep ReLU neural networks ..... 638  
Xia LIU & Di WANG
- Distraction-aware camouflaged object segmentation ..... 653  
Haiyang MEI, Xin YANG, Yunduo ZHOU, Gepeng JI, Xiaopeng WEI & Dengping FAN
- Spatio-temporal hierarchical query for referring video object segmentation ..... 674  
Meng LAN, Lefei ZHANG, Bo DU & Liangpei ZHANG
- Noise-robust distributed resource allocation with uncoordinated step-sizes ..... 692  
Wenwen WU, Shanying ZHU, Shuai LIU & Xinping GUAN
- Selection of simplexes in pinning control of higher-order networks ..... 708  
Jin ZHOU, Bo LI, Jun-An LU & Dinghua SHI