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《广播与电视技术》是由国家广播电视总局主管,国家广播电视总局广播电视规划院主办,《广播与电视技术》编辑部编辑出版的国家级技术期刊,是发布广播电视科技政策,反映事业建设成就,介绍高新技术,交流工作经验,传播各种信息的重要媒体。本刊主要面向各级广播电视行业主管部门、各级广播电台、电视台、网络公司、发射台、微波站、卫星站、节目制作单位及电教系统,同时对企业、工矿、学校、部队等具有公共广播电视设施的管理人员、技术人员也有参考价值。

为繁荣学术交流,本刊已加入《中国学术期刊网络出版总库》、“万方数据”和“维普中文科技期刊数据库”,有权选取部分论文在本刊关联平台(如广电猎酷网 www.lieku.cn、“广电猎酷”微信公众号等)发布,作者著作权使用费已随论文稿酬一次性给付。本刊充分尊重作者的原创成果并合理保护作者享有的权利,如作者不同意本刊之外其他形式的发布,请在来稿中声明,本刊将作适当处理。本刊及主办单位对本刊已发布作品的内容和观点不持有任何立场、不做任何承诺或保证、不承担任何责任。

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【18】基于国际传播需求的融媒体业务集成平台设计与建设

本文所述的融媒体业务集成平台的建设,为国际传播业务构建了从舆情汇聚、信息采集、融媒体内容生产、多渠道矩阵发布、分布式存储、全球化管理到综合传播数据反馈的全流程业务传播链条,是紧密结合国际传播业务需求设计的技术支撑平台,具有较高的实用性和可拓展性,为应对国际传播策略的实施或变化奠定了一定的技术基础。

【34】AVS技术发展以及AVS2编码优化与应用探索

自AVS标准工作组成立以来,我国自主技术的AVS编码标准历经近二十年的发展,已形成了全面覆盖标清到8K超高清视频信号的编码标准体系。中央广播电视总台作为“AVS技术应用联合推进组”主要成员单位,正在逐步部署开播使用AVS2编码压缩标准的多个4K超高清频道。本文所述基于AVS2编码优化研究提出的编码工具集的选择应用建议和对编码压缩系统中使用的AVS2实时编码器进行的编码性能测试评估,有助于进一步推进解决自主技术的编解码设备产品化、产业化应用,以及编码压缩的系统级部署,在一定程度上解决编码压缩、分发和接收的端到端关键技术问题。

【64】省级广电网络统一技术标准体系的规划与实践

当前,“全国一网”整合一体运营成为广电网络发展的一大趋势。随着网络整合的逐步深入,技术标准体系的分散、独立极易导致统一业务“下不去”、各地优质业务“传不开”,在一定程度上影响广电网络规模化、一体化运营效率。鉴于统一技术标准是实现高质量、高效率、规模化运营的重要基础,本文特以此为切入点,对省级广电网络统一技术标准体系建设的编目架构和实施策略开展研究,可咨业界同仁参考借鉴。

【84】应急广播省级播发平台的设计与实现

应急广播体系是国家社会治理的重要基础设施,是打通应急信息发布“最后一公里”、实现精准动员的重要渠道。本文以辽宁省应急广播省级播发平台的规划建设为例,介绍了应急广播省级播发平台的设计思路、总体架构与各功能模块的实现,可供读者参考。

【111】实时语音识别技术在广播电视安全播出AI辅助值守中的开发与应用

近年来,广播电视发射台站智慧化运营趋势日趋明显,多种智能辅助手段出现,广播电视安全播出已经逐步由人工值守转向设备辅助值守。本文通过引入实时语音识别技术,基于算法革新,通过AI人工智能辅助值守,改变传统的语言节目安全播出值守现状,大大减轻值守压力,大幅提升值守效能。



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[18] Design and Construction of Converged Media Business Integration Platform Based on International Communication Needs

Converged media business integration platform described in this paper builds a whole process business communication chain for international communication business from public opinion gathering, information collection, converged media content production, multi-channel matrix release, distributed storage, global management to comprehensive communication data feedback. It is a technical support platform designed to closely integrate the needs of international communication services, which has high practicability and scalability, and lays a certain technical foundation for dealing with implementation or change of international communication strategies.

[34] AVS Technical Development and AVS2 Encoding Optimization and Application Exploitation

Since the establishment of AVS Standards Working Group, China's independent AVS coding standard has developed for nearly two decades, and has formed a coding standard system covering SD to 8K UHD video signals. As a major member of "AVS Technology Application Joint Promotion Group", China Media Group is gradually deploying and broadcasting multiple 4K UHD channels using AVS2 encoding and compression standard. Selection and application recommendations of encoding tool set based on AVS2 encoding optimization research and encoding performance test and evaluation of AVS2 real-time encoder used in coding and compression system described in this paper will help to further promote productization and industrialization application of codec equipment with independent technology, as well as system-level deployment of coding and compression, which solves end-to-end key technical problems of code compression, distribution and reception to a certain extent.

[64] Planning and Practice of Unified Technical Standard System for Provincial Broadcasting and Television Network

At present, integrated operation of "one network across the country" has become a major trend in the development of radio and television network. With gradual deepening of network integration, decentralization and independence of technical standard system can easily lead to "unavailability" of unified and high-quality services, which will affect the scale of radio and television network and the efficiency of integrated operations to a certain extent. Since unified technical standards are an important foundation for achieving high-quality, high-efficiency, and large-scale operation, this paper takes this as an entry point to conduct research on cataloging architecture and implementation strategies for the construction of a unified technical standard system for provincial radio and television network, which can be used for reference by colleagues in the industry.

[84] Design and Implementation of Provincial Broadcasting Platform for Emergency Broadcasting

Emergency broadcasting system is an important infrastructure for national social governance and an important channel for opening up "last mile" of emergency information release and achieving precise mobilization. Taking planning and construction of provincial-level emergency broadcasting platform in Liaoning as an example, this paper introduces design ideas, overall architecture and realization of various functional modules of provincial-level emergency broadcasting platform, which can be used as a reference for readers.

[111] Development and Application of Real-time Speech Recognition Technology in AI-assisted Duty for Safe Broadcast of Radio and Television

In recent years, the trend of intelligent operation of radio and television transmitting stations has become increasingly obvious, and a variety of intelligent auxiliary methods have emerged. Safe broadcast of radio and television has gradually shifted from manual duty to equipment-assisted duty. In this paper, by introducing real-time speech recognition technology, based on algorithm innovation and Artificial Intelligence to assist on duty, this paper changes current situation of safe broadcast of traditional language programs, greatly reduces on duty pressure and greatly improves on duty efficiency.