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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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[13] 层次分析法在电视节目评价中的应用

通过建立科学的电视节目评价分析模型来系统评价节目融合传播效果已成为学界和业界共同关注的课题,内容力、传播力、互动力等均可作为电视节目评价的考察维度。本文从节目质量、节目传播效果、网络热度、观众满意度、行业认可、广告创收等6个维度建立评价体系并构建层次结构模型,通过层次分析法对节目进行多维分析,可对电视节目综合评价提供更加科学的依据。

[19] 5G NR组播广播综述

5G NR组播广播于2019年12月在国际移动通信标准化组织3GPP立项,并于2022年6月完成标准冻结,可用于提供应急和公共安全、车联网、IPv4/IPv6组播传输、IPTV、软件交付、群组通信和物联网等服务。本文对5G NR组播广播的设计思想、系统架构、会话工作、数据传输和现有功能等进行了总体介绍和分析,并对5G NR组播广播开展广播电视业务进行了展望。

[34] 700MHz频段地面数字电视与广电5G业务保护距离评估与兼容性方案研究

我国地面数字电视(DTMB)最高使用频段为694~702MHz,广电5G 700MHz上行发射频段为703~733MHz,仅1MHz频谱间隔带来的潜在干扰问题,也成为迫切需要评估与协调的焦点。本文计算出700MHz频段DTMB与广电5G业务推荐的保护限值并进行了模拟测试验证,并提出了2点兼容性优化方向,可供相关业务开展时借鉴参考。

[47] 微服务技术支持媒体云内容生产实践

随着云技术的发展,微服务的概念逐渐被熟知。在微服务架构的系统中,微服务的数量可依据业务需求以及被拆分任务的颗粒度来进行定义,在满足个性化需求的同时,还能实现快速部署和快速响应,可为媒体节目内容生产提供新的思路和解决方案。本文利用微服务技术支持媒体云内容生产的实践案例可供业界同仁参考。

[78] 广电遥控器扩展键与业务绑定的设计与实现

如何通过机顶盒的优化改进,不断增强有线电视行业的服务能力,持续提升有线电视用户体验是有线网络运营商一贯的努力方向。本文通过使用广电运营商遥控器的扩展键,来帮助有线电视用户在最短的时间及使用最少的操作步骤便能找到自己喜欢的内容或者应用,相关做法及实现方案值得参考借鉴。



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[13] Application of Analytic Hierarchy Process in TV Program Evaluation

Establishing a scientific evaluation and analysis model of TV programs to systematically evaluate the communication effect of program integration has become a topic of common concern in academia and industry. Content power, communication power, interaction power and so on can be used as the inspection dimensions of TV program evaluation. This paper establishes an evaluation system and a hierarchical structure model from the six dimensions of program quality, program communication effect, network popularity, audience satisfaction, industry recognition, advertising revenue generation, etc. By using analytic hierarchy process to conduct multi-dimensional analysis of programs, it can provide a more scientific basis for the comprehensive evaluation of TV programs.

[19] Overview of 5G NR Multicast Broadcasting

5G NR multicast broadcasting was approved in 3GPP of the international organization for standardization of mobile communications in December 2019, and the standard freeze was completed in June 2022. It can be used to provide emergency and public safety, Internet of vehicles, IPv4/IPv6 multicast transmission, IPTV, software delivery, group communication, Internet of things and other services. This paper introduces and analyzes the design idea, system architecture, session process, data transmission and existing functions of 5G NR multicast broadcasting, and prospects the development of radio and television business of 5G NR multicast broadcasting.

[34] Research on Protection Distance Evaluation and Compatibility Scheme of 700MHz Terrestrial Digital TV and Radio and Television 5G Services

The maximum frequency band of terrestrial digital television (DTMB) in China is 694~702MHz, and the uplink transmission frequency band of 5G 700MHz of radio and television is 703~733MHz. The potential interference caused by only 1MHz spectral interval has become the focus that needs to be evaluated and coordinated. In this paper, the recommended protection limits of 700MHz DTMB and radio and television 5G services are calculated and verified by simulation test, and two compatibility optimization directions are proposed, which can be used for reference when related services are carried out.

[47] Production Practice of Media Cloud Content Supported by Micro Service Technology

With the development of cloud technology, the concept of micro service is gradually known. In the system of micro service architecture, the number of micro services can be defined according to the business needs and the granularity of the split tasks. While meeting the personalized needs, it can also achieve rapid deployment and rapid response, which can provide new ideas and solutions for the production of media program content. The practical cases of using micro service technology to support the production of media cloud content in this paper can be used as a reference for colleagues in the industry.

[78] Design and Implementation of Binding Between Remote Controller Extension Key and Service of Radio and Television

How to optimize and improve the set-top box to continuously enhance the service capacity of the cable TV industry and improve the service experience of cable TV users is the consistent direction of cable network operators. This paper uses the expansion key of the remote control of radio and television operators to help cable TV users find their favorite content or applications in the shortest time and with the least operating steps. The relevant practices and implementation schemes are worth reference.