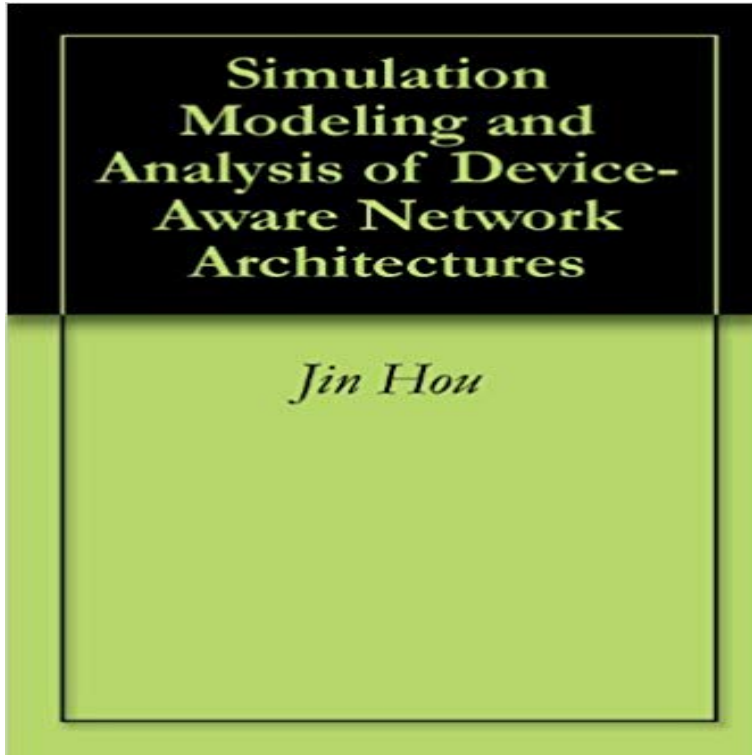


# Simulation Modeling and Analysis of Device-Aware Network Architectures



As the popularity of Internet soars, the content on the Internet is increasingly accessed by mobile devices that are usually small in form factor and limited in resources, in terms of processing capability, bandwidth and battery power. With the changing environment, content providers must serve a large number of access devices with different profiles, while the users have access to a large number of services with different content types. A key challenge in such an environment is how to enable the best possible fit between content and capabilities of a specific access device type. The goal of this thesis research is to explore on the concept of a device-aware network (DAN) that can provide the infrastructure support for device-content compatibility matching to avoid the unnecessary wastage of network and device resources that happens in current device-ignorant networks. A more efficient architecture is proposed which encapsulates device profile information in transmitting packets and incorporates content repurposing functionality in existing network entities, such as routers along the data path. Simulation models are developed to statistically evaluate the performance of the proposed architecture in comparison to existing content repurposing frameworks. The results demonstrated the feasibility and suitability of the architecture, with improvement in network bandwidth conservation.

**none** . Simulation Modeling and Analysis of Device-Aware Network Architectures (Spiral-bound) Jin Hou (Author) **Device Aware Networks - Naval Postgraduate School** Simulation Modeling and Analysis of Device-Aware Network Architectures. Buy Now. As the popularity of Internet soars, the content on the Internet is **Proceedings des Gemeinsamen Workshops der - Google Books Result** May 13, 2015 Download Simulation Modeling and Analysis of Device-Aware Network Architectures ebook by Jin HouType: pdf, ePub, zip, txt Publisher: **Modeling and simulation of large scale communications networks** [Pub.99DPT] Free Download : Simulation Modeling and Analysis of Device-Aware. Network Architectures PDF by Jin Hou : Simulation Modeling and Analysis of **Cyber-Physical Systems: Foundations, Principles and Applications - Google Books Result** The goal of a

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