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## Packet loss rate mapped to the quality of experience in the IOT network

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The Internet of Things includes internet technology, wired and wireless networks. In this paper, we investigate on the quality of experience (QoE) and packet loss rate of the network because QoE is important in the network and packet loss rate is the key point in many papers. In order to study the influence of packet loss on the users' quality of experience (QoE) and establish the mapping model of the two when the video transmit in the network, building a NS2+MyEvalvid simulation platform, by the method of modifying QoS parameters to simulate different degrees of packet loss, focus on the influence of packet loss on QoE and establish the mapping model between them. Experimental results show that, packet loss has a significant influence on quality of experience. Packet loss rate and the quality of experience present a nonlinear relationship, and use MATLAB to establish the mapping model. This model's accuracy is high, easy to operate and can detect real-time packet loss influence on the user's quality of experience (QoE). The contribution of this paper is first, through research obtained packet loss has a significant effect on the video; second, based on received the packet loss has a significant effect on QoE study and establishes the mapping model of packet loss rate and the user's quality of experience QoE. Next step is to set up considering network packet loss of video quality evaluation model, on the basis of considering different packet loss rates and different content complexity has effects on QoE which conclude from packet loss has effects on QoE's part, considering combination of other factors such as different packet loss models to establish video quality evaluation model consider the network packet loss, more accurate prediction of QoE is the future work.

## Biography

Jin Wang completed her Bachelor's degree in Software Engineering at Beijing University of Chemical Technology, Beijing, China, in 2012. She received National Scholarship in 2010 and National Endeavor Fellowship in 2009. She completed her Master's degree in Computer Application Technology at Shijiazhuang Tiedao University in 2015.

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