Artificial & Computational Intelligence / Published Online: March 2021
https://acors.org/ijacoi/VOL2_ISSUE1_04.pdf

Artificial & Computational Intelligence

An Optimization of Network Slicing and Human Computational Approach to Generate Cum Education Game Using MANET

Mrs. K. Gowri*[1],Dr. R. Latha M.Sc., B.Ed., MCA, M.Phil., M.E., Ph.D. *[2]
*[1]M.Phil. Research Scholar, Computer Science & Applications, SPIHER, Chennai.
akmgowri@gmail.com
*[2] Professor and Head, Dept. of Computer Science & Applications, SPIHER, Chennai

Abstract

Next generation leads the mobile world; number of mobile users is gradually increasing in developing countries like India. Due to the increase mobile user, education game through mobile adhoc network becomes a part of day today life for the teenagers and the person who wants to be relaxed. The Game through mobile leads to conference game, where the teammates may be in any place or anywhere can play a single game with multiple resources. Since a resource are shared in enormous in number through Mobile Adhoc Network(MANET), this proposed work mainly consist of two parts, First Part used to optimized the resource using Network slicing techniques in the MANET to develop system of education in terms of game, which makes the kids or teenage to develop their career in terms of education during their free time. Second Part is used to evaluate the computational metric and surveying based on the suggestion given by the teenagers or the person who plays the education game depends upon their category such as basic, advanced and professional level. Based on the human computational approach, this proposed education game has to be generating a new level of the game. This proposed work will provide the efficiency of Time taken to share the resource using Network Slicing and also effectively implement the next level of game based on the human Computational approach.

Keywords: Adhoc Network, MANET

1. Introduction

A network slice is a collection of resources and functions that are orchestrated to support a specific service. This includes software modules running at different locations as well as the nodescomputational resources, and communication resources in the backhaul and radio network. The intention is to only provide what is necessary for the service, avoiding unnecessary overheads and complexity. Thus, network slices enable tenants to compete with each other using the same physical infrastructure, but customizing their slices and network operation according to their market segment's characteristics and requirements. For instance, slices can be geared at supporting various IoT or M2M applications, such as the connectivity required to realize 'intelligent' vehicular systems. A key problem underlying network slicing is enabling efficient sharing of mobile network resources. One of the approaches considered in 3GPP suggests that resources could be statically partitioned based on fixed 'network shares'. However, given that slices' loads may be spatially in homogenous and time varying, it is desirable to allow resource allocations to be 'elastic', e.g., dependent on the slices' loads at different base stations. At the same time, tenants should be protected from one another, and retain the ability to autonomously manage their slice's resources, in order to better customize allocations to their customers. To that

end, it is desirable to adopt resource allocation models in which tenants can communicate their preferences to the infrastructure (say by dynamically subdividing their network share amongst their customers) and then have base stations' resources allocated according to their preferences (i.e., proportionally to the customers' shares).

2. Related Work

Jiaxiao Zheng et.al(2018), explained about the slices may wish to unilaterally manage their users' performance via admission control, which maximizes their carried loads subject to performance requirements. This can be modeled as a "traffic shaping" game with an achievable Nash equilibrium. Under high loads, the equilibrium is explicitly characterized, as are the gains in the carried load under SCPF versus static slicing. Detailed simulations of a wireless infrastructure supporting multiple slices with heterogeneous mobile loads show the fidelity of our models and the range of validity of our high-load equilibrium analysis.

Levi H. S. Leliset.al(2018), proposed the composition of the small portions into full levels is done by accounting for the human-annotated information. Evaluated the approach using computational metrics as well as surveying human subjects playing the levels. The results show that the human computation approach is able to generate levels that are perceived by people to have better visual aesthetics and to be more enjoyable to play than existing approaches. Another contribution of our paper is a dataset of the small annotated levels that can be used in future research for learning models for evaluating machine-generated content.

Walt Scacchi (2018), discussed about Computer games are progressively changing the everyday world in many positive ways. Game developers, whether focusing on entertainment market opportunities or game-based applications in nonentertainment domains such as education, healthcare, defense, or scientific research (that is, serious games), thus share a common interest in how best to engineer game software. This article examines techniques and technologies that inform contemporary computer game software engineering.

3. Proposed Methodology

3.1 Network Slicing using MANET

Next-generation wireless architectures are expected to enable slices of shared wireless infrastructure, which are customized to specific mobile operators/services for proposed education game. Given infrastructure costs and the stochastic nature of mobile services' spatial loads, it is highly desirable to achieve efficient statistical multiplexing among such slices when the proposed education game loaded. A study of proposed education game is a simple dynamic resource sharing policy, which allocates a "share" of a pool of (distributed) resources to each slice-share constrained proportionally fair (SCPF). Characterization of SCPF's performance gains over static slicing and general processor sharing the education game at various category with multithreading environment. Higher gains are obtained when a slice's spatial load is more "imbalanced" than, and/or "orthogonal" to, the aggregate network load, and that the overall gain across slices is positive based on the number of education game user proportional to the number of resources. Address the associated dimensioning problem. Under SCPF, traditional network dimensioning translates to a coupled share dimensioning problem, which characterizes the existence of a feasible share allocation, given slices' expected loads and performance requirements based on the education game in heterogeneous network with multithreading concepts. In Network slicing, education game provide the entire leadership board which includes the top score on particular category based on the individual, group such as college or school at district, state and national level etc.

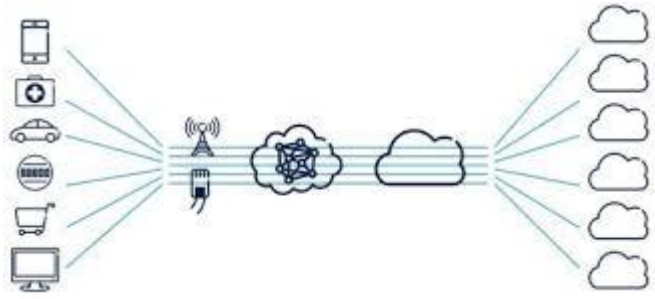

Figure 3.1 Network Slicing using MANET

Provide a solution for education game which act to robust share dimensioning for SCPF-based network slicing. Slices may wish to unilaterally manage their users' performance via admission control, which maximizes their carried loads subject to performance requirements for the educational game in MANET(Mobile Adhoc Network) . This can be modeled as a "traffic shaping" educational

game with an achievable Nash equilibrium. Under high a load, which means the number of educational game user increases, the equilibrium is explicitly characterized, as are the gains in the carried load under SCPF versus static slicing. Detailed simulations of a MANET supporting multiple slices with heterogeneous mobile loads show the fidelity of our models and the range of validity of our high-load equilibrium analysis in the proposed education game.

3.2 Non Entertainment Game

Education computer games are rich, complex, and often large-scale software applications. They're a significant, interesting, and often compelling domain for innovative research in software engineering techniques and technologies. Education computer games are progressively changing the everyday world in many positive ways. Education computer game developers, whether focusing on entertainment market opportunities or game-based applications for the education which will help for the students from the college or schools , they can prepare and improve their career towards their goal during their relax time. This Education game application with avoid the extra cost or extra time for person to spend in particular area to develop their career. In another word, the user need not go for separate institution or tuition center to develop their career. They no need to study as subject and they can develop their skills in terms of game related to the appropriate subject. Thus share a common interest in how best to engineer game software. This article examines techniques and technologies that inform contemporary education computer game software engineering in the recent decades in MANET for the next generations.

3.3 Human Computational Approach

Education game is not a static game, its acts as dynamics based the user feedback the next level will be upgraded. Based on the feedback given by the existing user, the next level will be updated based on appropriate user characteristics and their attitudes with conditional probability.

A key challenge in procedural content generation is to automatically evaluate education game, whether the generated content has good quality as describe an approach that uses non-expert workers to evaluate small portions of levels generated by an off-the-shelf generation system for education computer game. Several such evaluated portions of education game are then combined to form full levels of the game using a mathematical progression arc model such as conditional probability. The composition of the small portions into full levels is done by accounting for the human-annotated information for the appropriate education game are evaluated the approach using computational metrics as well as surveying human subjects playing the levels. The results show that the human computation approach is able to generate levels that are perceived by people to have better visual aesthetics and to be more enjoyable to play than existing approaches. Another contribution of this proposed paper is a dataset of the small annotated levels that can be used in future research for learning models for evaluating machine-generated content.

4. Conclusion

As conclude that, this proposed work will optimize the loading time of the education game based on network slicing which will be very effective on determining the next level of computational education game. This proposed education game will avoid the time to travel for the appropriate institution or tuition center to learn the particular subject and also the extra amount spend by the user for the appropriate course. The important aspects is the student of the college or school, they will learn the subject as game not as subject in their career. This Proposed education game will plays vital role in the next generation which leads to efficient in appropriate Network Slicing and next level of education game predicted on existing human computational approach which leads to be very effective in the MANET.

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