

Energy Efficient and Deadline Satisfied  
Task Scheduling in Mobile  
Cloud Computing

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# ABSTRACT

- With the shortcoming of long network delay and long response time, traditional mobile cloud computing can't meet the need of delay sensitive business, such as Virtual Reality and Augmented Reality.
- Mobile edge computing has emerged and provided a way to solve the problems.
- During the movement of the user, if an optimal data center is detected, the virtual machine migrates from the current data center to the optimal one.
- It is important to note that virtual machine migration increases costs while enhancing the user's experience. How to balance costs and benefits is what we need to focus on.
- The core issue of the migration strategy is whether, when, and where to migrate.
- In this paper, we propose an edge computing migration strategy based on multiple attribute decision making to deal with the issue. Furthermore, we demonstrate the effectiveness of the migration strategy by simulation.

# EXISTING SYSTEM

- ▶ shortcoming of long network delay and long response time, traditional mobile cloud computing can't meet the need of delay sensitive business, such as Virtual Reality and Augmented Reality.
- ▶ Mobile edge computing has emerged and provided a way to solve the problems. During the movement of the user, if an optimal data center is detected, the virtual machine migrates from the current data center to the optimal one.

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# PROPOSED SYSTEM

- ▶ It is important to note that virtual machine migration increases costs while enhancing the user's experience. How to balance costs and benefits is what we need to focus on.
- ▶ The core issue of the migration strategy is whether, when, and where to migrate. In this paper, we propose an edgecomputing migration strategy based on multiple attribute decision making to deal with the issue. Furthermore, we demonstrate the effectiveness of the migration strategy by simulation.

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# HARDWARE REQUIREMENTS

- ▶ System : Pentium IV 2.4 GHz.
- ▶ Hard Disk : 40 GB.
- ▶ Floppy Drive : 1.44 Mb.
- ▶ Monitor : 15 VGA Colour.
- ▶ Mouse : Logitech.
- ▶ Ram : 512 Mb.

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# SOFTWARE REQUIREMENTS

- ▶ Operating system : Windows 7 (32-bit)
- ▶ Coding Language : C#.NET/ JAVA
- ▶ Data Base : SQL SERVER 2005/HEIDISQL

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# CONCLUSION

- ▶ In this paper, we propose a mobile edge computing migration strategy based on multiple attribute decision making. The strategy can solve the problem whether, when and where to migrate efficiently.
- ▶ Simulation results show that the mobile edge computing migration strategy can choose the appropriate server, significantly reduce the user's response time and improve the quality of user's experience.
- ▶ More simulation will be done in the future, and we will focus on optimizing the migration strategy that can be applied to real networks which are more complex.

# REFERENCES

- [1] Index C V N. Forecast and Methodology, “2015-2020 White Paper[R]. Technical Report,” Cisco, 2016.
- [2] Y. C. Hu, M. Patel, D. Sabella, N. Sprecher, and V. Young, "Mobile Edge Computing A key technology towards 5G," ETSI White Paper, 2015.
- [3] A. Ahmed and E. Ahmed, "A survey on mobile edge computing," ACM SIGCOMM Computer Communication Review, vol. 8, pp. 118, 2016.
- [4] Y. Cao, P. Hou, D. Brown, J. Wang, and S. Chen, "Distributed Analytics and Edge Intelligence:Pervasive Health Monitoring at the Era of Fog Computing," The Workshop on Mobile Big Data ACM, pp. 43-48, 2015.
- [5] T. Taleb and A. Ksentini., "Follow Me Cloud: Interworking Federated Clouds and Distributed Mobile Networks," Communications Magazine IEEE, pp. 12-19, 2013.