

QoE driven CDN resource allocation approach: literature review

Hanyu Li

January 28, 2020

1 The method that is being used now by industry

2 State of art works

2.1 drawbacks

3 User heterogeneity: a new way to improve QoE

4 How we mitigate those drawbacks

Reference

- [1] Junchen Jiang, Vyas Sekar, Henry Milner, Davis Shepherd, Ion Stoica, and Hui Zhang. CFA: A practical prediction system for video qoe optimization. In *13th USENIX Symposium on Networked Systems Design and Implementation, NSDI 2016, Santa Clara, CA, USA, March 16-18, 2016*, pages 137–150, 2016.
- [2] Guowei Zhu, Chou Mo, Zhi Wang, and Wenwu Zhu. User mapping strategies in multi-cloud streaming: A data-driven approach. In *2016*

- IEEE Global Communications Conference, GLOBECOM 2016, Washington, DC, USA, December 4-8, 2016*, pages 1–6, 2016.
- [3] Athula Balachandran, Vyas Sekar, Aditya Akella, Srinivasan Seshan, Ion Stoica, and Hui Zhang. Developing a predictive model of quality of experience for internet video. In *ACM SIGCOMM 2013 Conference, SIGCOMM'13, Hong Kong, China, August 12-16, 2013*, pages 339–350, 2013.
 - [4] Fatima Haouari, Emna Baccour, Aiman Erbad, Amr Mohamed, and Mohsen Guizani. Qoe-aware resource allocation for crowdsourced live streaming: A machine learning approach. In *2019 IEEE International Conference on Communications, ICC 2019, Shanghai, China, May 20-24, 2019*, pages 1–6, 2019.
 - [5] Xu Zhang, Siddhartha Sen, Daniar Kurniawan, Haryadi Gunawi, and Junchen Jiang. E2E: embracing user heterogeneity to improve quality of experience on the web. In *Proceedings of the ACM Special Interest Group on Data Communication, SIGCOMM 2019, Beijing, China, August 19-23, 2019*, pages 289–302, 2019.
 - [6] Mowei Wang, Yong Cui, Xin Wang, Shihan Xiao, and Junchen Jiang. Machine learning for networking: Workflow, advances and opportunities. *IEEE Network*, 32(2):92–99, 2018.
 - [7] Luca De Cicco, Saverio Mascolo, and Vittorio Palmisano. Qoe-driven resource allocation for massive video distribution. *Ad Hoc Networks*, 89:170–176, 2019.