

CS218 Project 1: Proposed Research Topics

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Research Topics in Cloud Computing:

1. Analysis of various Load Balancing algorithms in Cloud Computing

- [1] Zhao, Jia, et al. "A heuristic clustering-based task deployment approach for load balancing using bayes theorem in cloud environment." IEEE Transactions on Parallel and Distributed Systems 27.2 (2016): 305-316
- [2] Huang, Weihua, et al. "Load balancing algorithm for virtual cluster using fuzzy clustering." Computer and Communications (ICCC), 2016 2nd IEEE International Conference on. IEEE, 2016.
- [3] Khara, Satvik, and Umang Thakkar. "A novel approach for enhancing selection of Load Balancing algorithms dynamically in cloud computing." Computer, Communications and Electronics (Comptelix), 2017 International Conference on. IEEE, 2017.

2. Reducing Latency and Response Time, and Surveying resource scheduling in Mobile Cloud Computing

- [1] Beck, Matthew, Wei Hao, and Alina Campan. "Accelerating the Mobile cloud: Using Amazon Mobile Analytics and k-means clustering." Computing and Communication Workshop and Conference (CCWC), 2017 IEEE 7th Annual. IEEE, 2017.
- [2] Zhang, Yuan, Jinyao Yan, and Xiaoming Fu. "Reservation-based resource scheduling and code partition in mobile cloud computing." Computer Communications Workshops (INFOCOM WKSHPS), 2016 IEEE Conference on. IEEE, 2016.
- [3] Rahimi, M. Reza, et al. "Mobile cloud computing: A survey, state of art and future directions." Mobile Networks and Applications 19.2 (2014): 133-143.

3. Detection and prevention of security vulnerabilities and threats in cloud computing

- [1] Almorsy, Mohamed, John Grundy, and Ingo Müller. "An analysis of the cloud computing security problem." arXiv preprint arXiv:1609.01107 (2016).
- [2] Tirthani, Neha, and R. Ganesan. "Data Security in Cloud Architecture Based on Diffie Hellman and Elliptical Curve Cryptography." IACR Cryptology ePrint Archive 2014 (2014): 49.
- [3] Rasheed, Hassan. "Data and infrastructure security auditing in cloud computing environments." International Journal of Information Management 34.3 (2014): 364-368.