CS4545/6545 Course Project, Winter 2021



Project Title: IoT Big Data Benchmark

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Motivation/problem statement:

Transferring all IoT Big Data to a concentrated cloud for information investigation is infeasible due to the unnecessary dormancy and transmission capacity restriction of the Internet. A promising way to deal with tending to the difficulties for information investigation in IoT is "edge cloud" that pushes different registering and information examination capacities to numerous edge mists. MapReduce furnishes a proficient method to manage a lot of information. When performing information investigation, a test is to anticipate the presentation of MapReduce occupations.

Proposal key points:

We propose to evaluate IoTDeM, which is an all-inclusive IoT Big Data-arranged model for anticipating MapReduce execution in different edge mists. IoTDeM can foresee MapReduce occupations' complete execution time in an overall usage situation with shifting lessen sums and group scales in Hadoop. The all-encompassing model depends on chronicled work execution records and Locally Weighted Linear Regression (LWLR) procedures to foresee the execution time of each work.

Milestones and timeline:

•Proposal: 2021-02-25

Project (progress) presentation: 2021-04-01

•Demo: 2021-04-01

•Final report: 2021-04-15