A
MASTER'S
THESIS
ON

Cache Management for Inter Vehicle Communication System

Submitted in partial fulfillment of
the requirement for the award
of the degree of

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This is to certify that thesis entitled ***Cache Management for Inter Vehicle Communication system*** which is submitted by **Sumit Kumar** in partial fulfillment of the requirement for the award of **M.Tech.** Degree in **Software Engineering** to **Delhi Technological University, Delhi** is a record of the candidate own work carried out by him under my supervision. As per my knowledge, the matter embodied in this thesis is original and has not been submitted for the award of any other degree.

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<u>ABSTRACT</u>

In Inter Vehicle Communication caching plays a vital role owing to its ability to alleviate the performance and availability limitations of weakly-connected and disconnected operations. An efficient way to reduce query delay, save bandwidth and improve system performance is to cache the frequently accessed data objects at the local buffer of a vehicle. Owing to the disconnection and mobility of the vehicle clients, classical cache management strategies may be inappropriate for vehicular environments. Generally, cache placement and cache discovery techniques constitute cache management in mobile environment.

In this thesis, a distributed cache management architecture which includes the above techniques is designed. The architecture also includes a location update procedure for a moving vehicle client.

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