VRSense: Validity Region Sensitive Query Processing Strategies for Static and Mobile Point-of-Interests in MANETs

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Abstract

Querying any point-of-interest (POI) in anywhere is a major part of location-based services (LBS) and has been applied to diverse wireless and/or mobile networks for realizing seamless services and mobile and ubiquitous computing. In particular, designing an efficient query processing scheme is admittedly challenging in mobile ad hoc networks (MANETs) because of the lack of centralized coordination, limited computing and communication capabilities, and time-varying network topologies. In this talk, we explore a set of query processing strategies based on a validity region to efficiently update the freshness of the queried POI and reduce the query traffic in MANETs.

Bio

Byungkwan Jung received his B.S. degree in Accounting -- Taxation from Kyunghee University, Seoul, Republic of Korea and M.S. degree in the Dept. of Computer Science from South Dakota State University, Brookings in 2010 and 2014, respectively. He is currently a Ph.D. candidate in the Dept. of Computer Science and a research assistant in Institute for Measurement, Methodology, Analysis & Policy (IMMAP) at Texas Tech University. His research interests include wireless networks and mobile computing, cybersecurity, image processing, and machine learning.