



**RESEARCH ARTICLE**

# Privacy Protected Query Processing on Spatial Networks

K. SASIKALA<sup>1</sup>, REKA.R<sup>2</sup>, SASIKALA.K<sup>3</sup>

<sup>1</sup>VMU, India

<sup>2</sup>Assistant Professor, VMKVEC, India

<sup>3</sup>Assistant Professor, VMKVEC, India

<sup>1</sup>[sasinivethitha@gmail.com](mailto:sasinivethitha@gmail.com), <sup>2</sup>[rekaresearch@gmail.com](mailto:rekaresearch@gmail.com), <sup>3</sup>[sasikalaresearch@gmail.com](mailto:sasikalaresearch@gmail.com)

---

**Abstract—** *Privacy Protected spatial queries refer to spatial queries whose answers rely on the location of the inquirer. Efficient processing of Privacy Protected spatial query is of critical importance with the ever-increasing deployment and use of mobile technologies. We show that Privacy Protected spatial query have certain unique characteristics that the traditional spatial query processing in centralized databases does not address. For example, a significant challenge is presented by wireless broadcasting environments, which have excellent scalability but often exhibit high latency database access. We present a novel query processing technique that, though maintaining high scalability and accuracy, manages to reduce the latency considerably in answering Privacy Protected spatial query. Our approach is based on peer-to-peer sharing, which enables us to process queries without delay at a mobile host by using query results cached in its neighboring mobile peers. We demonstrate the feasibility of our approach through a probabilistic analysis, and we illustrate the appeal of our technique through extensive simulation results.*

**Key Terms:** - *LBSQ; spatial query; peer-to-peer sharing; Mobile Hosts; R-Tree*

---

Full Text: <http://www.ijcsmc.com/docs/papers/August2013/V2I8201355.pdf>