

First Interdisciplinary Workshop on Mobility, Data Mining and Privacy

Preserving anonymity in geographically-referenced data

Rome, Italy - 14 February 2008



The technologies of mobile communications and ubiquitous computing pervade our society, and wireless networks sense the movement of people and vehicles, generating large volumes of mobility data. This is a scenario of great opportunities and risks: on one side, mining this data can produce useful knowledge, supporting sustainable mobility and intelligent transportation systems; on the other side, individual privacy is at risk, as the mobility data contain sensitive personal information. A new multidisciplinary research area is emerging at this crossroads of *mobility, data mining, and privacy*.

Workshop Aim

In this context, this workshop is aimed at fostering the interdisciplinary dialogue among researchers and professionals in computer science, law, geography, social sciences, statistics, telecommunication and transportation engineering. It will also be a forum to share the research results of the European project GeoPKDD and the European coordination action KDubiq.

Key Question

Can we allow the analysis of geographically referenced data while guaranteeing the right to anonymity of the data subjects? This is both a scientific problem and a social (or ethical, or legal) challenge: the privacy issues related to the ICTs can only be addressed through an alliance of technology, legal regulations and social norms.

Program at a glance

- 09:00-09:30 Opening session
- 09:30-10:30 GeoPKDD showcase session: the convergence of mobility, data mining and privacy: highlights from the GeoPKDD EU project.
- 11:00-13:00 Invited lectures - session 1: perspectives from multiple disciplines.
- 14:00-16:00 Invited lectures - session 2: perspectives from multiple disciplines.
- 16:30-18:00 Panel: Is it possible to analyze geographically referenced data while guaranteeing the anonymity of the data subjects? Positions from panellists, audience feedback, discussion.

Invited lectures

The right to anonymity

Giusella Finocchiaro, University of Bologna, Italy

Reasonable expectations of geoprivacy

J. (Sjaak) Nouwt, Tilburg Institute for Law, Technology and Society, The Netherlands

Spatial privacy in a networked society

Anne Uteck, Faculty of Law, University of Ottawa, Canada

Pseudonyms in eID: an assumed identity?

Andreas Mitras, ENISA, European Network and Information Security Agency

Information metrics for privacy and anonymity in spatiotemporal data

Christopher W. Clifton, Department of Computer Science, Purdue University, Indiana, U.S.A.

Tracking and surveying mobility of people: ethical and equity issues through political challenges

Marius Thériault, Centre for Research in Regional Planning and Development, Université Laval, Québec, Canada

Data privacy: lessons from economics

Stan Matwin, School of Information Technology and Engineering, University of Ottawa, Canada

Combining trust and privacy in car-generated announcements over vehicular ad hoc networks

Josep Domingo-Ferrer, UNESCO Chair in Data Privacy, Rovira i Virgili University, Tarragona, Catalonia

GeoPKDD showcase session

Mobility, Data Mining and Privacy: a vision of convergence

Fosca Giannotti, KDD LAB, ISTI-CNR, Pisa, Italy (GeoPKDD coordinator)

Mining useful knowledge from anonymous mobility data

Dino Pedreschi, KDD LAB, University of Pisa, Italy

Fostering the interdisciplinary dialogue through the GeoPKDD Privacy Observatory

Franco Turini, KDD LAB, University of Pisa, Italy

Program Chairs

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Franco Turini *KDDLab, University of Pisa, Italy*

Organizing Committee

Codrina Lauth *Fraunhofer IAIS, Germany*

Tiziana Mazzone *KDDLab, Univ. Pisa and ISTI-CNR, Italy*

Javier Sanchez Monzon, *Fraunhofer IAIS, Germany*

Scientific Committee

Maurizio Atzori *KDDLab, ISTI-CNR, Pisa, Italy*

Cosimo Comella *Italian Data Protection Commission*

Giusella Finocchiaro *University of Bologna, Italy*

Fosca Giannotti *KDDLab, ISTI-CNR, Pisa, Italy*

Yucel Saygin *Sabanci University, Istanbul, Turkey*

Erkay Savas *Sabanci University, Istanbul, Turkey*

Vassilios Verykios *University of Thessaly, Volos, Greece*

<http://wiki.kdubiq.org/mobilemprivacyworkshop/>

