

# Manolis Terrovitis

## Personal Information

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**Date of Birth** 23/5/1977  
**Citizenship** Hellenic  
**Married** No  
**Military service** Fulfilled

## Education

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**School of Electrical and Computer Eng. , National Technical University of Athens**  
2007 PhD thesis (14/5/2007)  
Title: «*Modeling and Operational Issues in Pattern Base Management Systems*»  
Advisor: Prof. Timos Sellis  
Knowledge and Database Systems Laboratory  
2001 Diploma (BSc) in Electrical and Computer Engineering

## Professional Experience

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**Institute for the Management of Information Systems (IMIS), RC "Athena"**  
2008-now Post doc researcher in databases field (with a break for military service)  
**Department of Computer Science , The University of Hong Kong**  
2007 – 20 08 Post doc researcher in databases field, in collaboration with Assoc. Prof. Mamoulis

## Research Interests

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**Privacy Preservation** – sparse multidimensional data, social networks  
**Indexing** – set valued attributes, containment queries  
**Spatiotemporal Databases** – query evaluation  
**Modeling** – ETL, Pattern bases

## Teaching Experience

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**Institute for the Management of Information Systems, RC, "Athena"**  
2009-2012 Co-supervision of two PhD theses and two Diploma theses  
**MSc "GeoInformatics", National Technical University of Athens**  
2011-2012 Adjunct Lecturer  
    ○ Computational Methods in GeoInformatics, postgraduate course  
    ○ Spatial Databases, postgraduate course  
2010-2011 Adjunct Lecturer  
    ○ Spatial Databases, postgraduate course  
2009-2010 Adjunct Lecturer  
    ○ Computational Methods in GeoInformatics, postgraduate course  
    ○ Spatial Databases, postgraduate course  
2002 – 2005 Teaching Assistant  
    ○ Artificial Intelligence, undergraduate course  
    ○ Programming II, undergraduate course  
2002 – 2006 Co-supervision of diploma thesis  
    ○ Optimization of Data Mining Techniques  
    ○ Navigation algorithms for the public transportation network of Athens  
    ○ Index development for set-valued attributes  
    ○ Reusing data mining results  
**Department of Computer Science , University of Peloponnese**  
2010-2011 Adjunct Lecturer  
    ○ Databases, postgraduate course  
2009 - 2010 Adjunct Lecturer  
    ○ Databases, postgraduate course

- 2008 – 2009
- Computational methods in Geoinformatics
  - Adjunct Lecturer
  - Distributed Systems, undergraduate course
  - Object Oriented Programming, undergraduate course

## Publications

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**Citations** Google Scholar reports 450 citations to my research work. A manually collected list that reports 284 cross citations is available at <http://web.imis.athena-innovation.gr/~mter/terrovitis-citations-eng.pdf> .

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## Journals

- J1. **Manolis Terrovitis**, John Liagouris, Nikos Mamoulis Spiros Skiadopoulos. *Privacy by Disassociation*, accepted in **PVLDB**, 2012.
- J2. **Manolis Terrovitis**. *Privacy preserving publishing of set-values*. **Privacy Objervatory Magazine**, 2, 2011.
- J3. **Manolis Terrovitis**. *Privacy preservation in the dissemination of location data*. **SIGKDD Explorations**, 13(1), 2011.
- J4. **Manolis Terrovitis**, Nikos Mamoulis and Panos Kalnis. *Local and Global Recoding Methods for Anonymizing Set-valued Data*. **The VLDB Journal** 20(1), 2011.
- J5. **Manolis Terrovitis**, Nikos Mamoulis and Panos Kalnis. *Privacy-preserving Anonymization of Set-valued Data*. In Proceedings of the VLDB Endowment (**PVLDB**) (former VLDB proceedings), 1(1), 2008.
- J6. **Manolis Terrovitis**, Panos Vassiliadis, Spiros Skiadopoulos, Elisa Bertino, Barbara Catania, Anna Maddalena and Stefano Rizzi. *Modeling and language support for the management of pattern-bases*. **Data & Knowledge Engineering (DKE)**, 62(2): 368-397 (2007). (Five year impact factor 1.863)
- J7. Panos Vassiliadis, Alkis Simitsis, Panos Georgantas, **Manolis Terrovitis**, Spiros Skiadopoulos. *A generic and customizable framework for the design of ETL scenarios*. **Information Systems**, 30(7): 492-525 (2005). ). (Five year impact factor 2.261)

## Book Chapters

- B1. **Manolis Terrovitis**, Nikos Mamoulis, and Panos Kalnis. *Privacy preservation in the publication of sparse multidimensional data*. In **Privacy-Aware Knowledge Discovery: Novel Applications and New Techniques**, Francesco Bonchi, Elena Ferrari, Eds, Chapman & Hall/CRC Press, Data Mining and Knowledge Discovery Series, 2010.
- B2. Georgios Gratsias, Dimitris Sacharidis, **Manolis Terrovitis** and Timos Sellis. *Privacy in the publication and exchange of data*. In **Privacy and Information and Communication Technologies: Technical and Legal Issues**, C. Lambrinoudakis, L. Mitrou, S. Gritzalis, S. K. Katsikas, Eds, 2009, Athens, Greece, Papatotiriou Pubs.

## Conferences

- C1. **Manolis Terrovitis**, Panagiotis Bouros, Panos Vassiliadis, Timos Sellis, Nikos Mamoulis. *Efficient Answering of Set Containment Queries for Skewed Item Distributions*. In Proceedings of the 14th International Conference on Extending Database Technology (**EDBT**), Uppsala, Sweden, 2011.
- C2. **Manolis Terrovitis** and Nikos Mamoulis. *Privacy Preservation in the Publication of Trajectories*. In Proceedings of the 9th International Conference on Mobile Data Management (**MDM '08**), Beijing, China, 2008.

- C3. Dimitris Sacharidis, Kostas Patroumpas, **Manolis Terrovitis**, Verena Kantere, Michalis Potamias, Kyriakos Mouratidis and Timos Sellis. *On-Line Discovery of Hot Motion Paths*. In Proceedings of the 11th International Conference on Extending Database Technology (**EDBT '08**), Nantes, France, 2008.
- C4. **Manolis Terrovitis**, Spyros Passas, Panos Vassiliadis and Timos Sellis. *A combination of trie-trees and inverted files for the indexing of set-valued*. In Proceedings of the 15<sup>th</sup> ACM Conference on Information and Knowledge Management (**CIKM '06**).
- C5. **Manolis Terrovitis**, Spiridon Bakiras, Dimitris Papadias, and Kyriakos Mouratidis. *Constrained Shortest Path Computation*. In Proceedings of the 9<sup>th</sup> International Symposium on Spatial and Temporal Databases, (**SSTD '05**), Brazil, 2005.
- C6. Alkis Simitsis, Panos Vassiliadis, **Manolis Terrovitis** and Spiros Skiadopoulos. *Graph-Based Modeling of ETL Activities with Multi-Level Transformations and Updates*. In Proceedings of the 7<sup>th</sup> International Conference on Data Warehousing and Knowledge Discovery (**DaWaK '05**), Copenhagen, Denmark, 2005.
- C7. Panos Vassiliadis, Alkis Simitsis, **Manolis Terrovitis** and Spiros Skiadopoulos. *Blueprints for ETL Workflows*. In Proceedings of the 24<sup>th</sup> Int. Conference on Conceptual Modeling, (**ER '05**), Klagenfurt, Austria, 2005.
- C8. **Manolis Terrovitis**, Panos Vassiliadis, Spiros Skiadopoulos, Elisa Bertino, Barbara Catania, Anna Maddalena. *Modeling and Language Support for the Management of Pattern-Bases*. In Proceedings of the 16<sup>th</sup> International Conference on Scientific and Statistical Database Management (**SSDBM '04**), Santorini, Greece, 2004.
- C9. Panagiotis Bouros, Theodore Dalamagas, Timos Sellis, **Manolis Terrovitis**. *PatManQL. A language to manipulate patterns and data in hierarchical catalogs*. In Proceedings of the 1<sup>st</sup> EDBT Workshop on Pattern Representation and Management (**PaRMa '04**), Heraklion, Greece, 2004.
- C10. Stefano Rizzi, Elisa Bertino, Barbara Catania, Matteo Golfarelli, Maria Halkidi, **Manolis Terrovitis**, Panos Vassiliadis, Michalis Vazirgiannis, Euripides Vrachnos. *Towards a Logical Model for Patterns*. In Proceedings of the 22<sup>nd</sup> International Conference on Conceptual Modeling, (**ER '03**), Chicago, USA, 2003.
- C11. Panos Vassiliadis, Alkis Simitsis, Panos Georgantas, **Manolis Terrovitis**: *A Framework for the Design of ETL Scenarios*. In Proceedings of the 15<sup>th</sup> Conference on Advanced Information Systems Engineering (**CAiSE '03**), Klagenfurt, Austria, 2003.

#### National Events

- N1. **Manolis Terrovitis**, Nikos Mamoulis and Panos Kalnis. *Privacy-preserving Anonymization of Set-valued Data*. In the Hellenic Data Management Symposium (HDMS), 2010.
- N2. Dimitris Sacharidis, Kostas Patroumpas, **Manolis Terrovitis**, Verena Kantere, Michalis Potamias, Kyriakos Mouratidis, and Timos Sellis. *On-line Discovery of Hot Motion Paths*. In the Hellenic Data Management Symposium (HDMS), 2008.
- N3. **Manolis Terrovitis**, Spyros Passas, Panos Vassiliadis and Timos Sellis. *A combination of trie-trees and inverted files for the indexing of set-valued* In the Hellenic Data Management Symposium (HDMS), 2006.
- N4. Dinos Arkoumanis, **Manolis Terrovitis** and Lefteris Stamatogiannakis. *Heuristic Algorithms for Similar Configuration Retrieval in Spatial Databases*. In Proceedings of the 2<sup>nd</sup> Hellenic Conference on Artificial Intelligence, (**SETN '02**), 2002.

#### Under Revision

- Y1 Reza Sherkat, **Manolis Terrovitis** and Nikos Mamoulis. *Anagrams for String Databases, (submitted to ICDE 2013)*.

## Research Projects

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<b>MODISSENSE</b>	A Distributed Platform for the Development of Social Networking Services over Mobile Devices. I work as project manager. The project is part of the “Synergasia” Programme of GSRT. 2011-today
<b>CAP</b>	Common Airport Point. I work as a senior researcher. The project is part of the “Synergasia” Programme of GSRT. 2010-today
<b>PANDA</b>	Patterns for next-generation database systems (PANDA) project. I worked as a researcher on the conceptual and logical model for patterns in the PANDA project. ( <a href="http://dke.cti.gr/panda/">http://dke.cti.gr/panda/</a> ). (IST-2001-33058), 2002-2005
<b>STATLAS</b>	A statistical atlas for the European union (STATLAS) project. I worked as a database designer and administrator for the spatial database of the STATLAS project. ( <a href="http://www.statlas.org/">http://www.statlas.org/</a> ). IST-2000-26209, 2002-2005
<b>CONFIDENT</b>	Confident Information Environment for the Independent Living of People with Severe Disabilities. I worked as an Application Designer in the CONFIDENT project. IST-2000-27600 ( <a href="http://i-sense.iccs.gr/Project_CONFIDENT.htm">http://i-sense.iccs.gr/Project_CONFIDENT.htm</a> ). 2003-2004

## Reviewing experience

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<b>Journals</b> (regular reviewer)	Very Large Data Bases Journal ( <i>VLDBJ</i> ) IEEE Transactions on Knowledge and Data Engineering ( <i>TKDE</i> ) IEEE Transactions on Parallel and Distributed Systems ( <i>TPDS</i> ) Springer International Journal of Information Security ( <i>IJIS</i> ) Springer LNCS Transactions on Large-Scale Data and Knowledge-Centered Systems ( <i>TLDKS</i> ) Data & Knowledge Engineering ( <i>DKE</i> ) Data Mining and Knowledge Discovery ( <i>DMKD</i> ) Journal of Computer Science and Technology ( <i>JST</i> ) Elsevier Information Sciences ( <i>INS</i> ) Elsevier Journal of Computer and System Sciences ( <i>JCSS</i> ) Elsevier Journal of Systems and Software ( <i>JSS</i> ) Elsevier Knowledge and Information Systems ( <i>KAIS</i> ) Elsevier Information Systems ( <i>IS</i> )
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<b>Program</b>	14 <sup>th</sup> East-European Conf. on Advances in Databases and Inf. Systems ( <i>ADBIS'10</i> )
<b>Committees</b>	15 <sup>th</sup> East-European Conf. on Advances in Databases and Inf. Systems ( <i>ADBIS'11</i> ) IEEE Int.l Workshop on Privacy Aspects of Data Mining, 2011 ( <i>PADM'11</i> ) 18 <sup>th</sup> ACM Conference on Knowledge Discovery and Data Mining ( <i>SIGKDD'12</i> ) 1st International Workshop on Privacy in Social Data. (In conjunction with ICDM 2012)

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**External Reviewer** VLDB, SIGMOD, PODS, EDBT, SSTD, ACM GIS, ECDL and others.

## Other Research Experience

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2/2005	Visiting fellow for one month to the research group of Prof. Dimitris Papadias in the Hong Kong University of Science and Technology (HKUST).
5/2008	Visiting fellow for one month to the research group of Prof. Panos Kalnis in the National University of Singapore (NUS).
3/2010	Visiting fellow for one month to the research group Prof. Nikos Mamoulis in the University of Hong Kong (HKU).
11/2010	Visiting fellow for one month to the research group Prof. Nikos Mamoulis in the University of Hong Kong (HKU).
2/2012	Visiting fellow for one month to the research group Prof. Nikos Mamoulis in the University of Hong Kong (HKU).

## Professional Consulting Experience

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- 03/2011-now Consulting work for the Greek General Secretariat for Information Systems on the anonymization of tax data.
- 05/2010 Consulting work for the Greek Special Secretariat for Digital Planning on the Open Data Initiative.
- 06/08-06/09 Consultant at Roikos S.A. for the management of Greek cadastral data.
- 05/06-12/06 Consultant at Biovista Inc. ([www.biovista.com](http://www.biovista.com)) for database management issues.
- 09/04-02/05 Consultant at Globo Technologies S.A. ([www.globo.gr](http://www.globo.gr)).

## References

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**Prof. Timos Sellis**

Director of the Institute for the Management of Information Systems (IMIS), RC  
“Athena” and

National Technical University of Athens (NTUA)

[timos@imis.athena-innovation.gr](mailto:timos@imis.athena-innovation.gr)

+(30) 2106990522

**Assoc. Prof. Nikos Mamoulis**

Dept. of Computer Science

The University of Hong Kong (HKU)

[nikos@cs.hku.hk](mailto:nikos@cs.hku.hk)

+ (852)28578243

**Assistant Professor Spiros Skiadopoulos**

Dept. of Computer Science and Technology (UOP)

University of Peloponnese

[spiros@uop.gr](mailto:spiros@uop.gr)

+(30) 2710-372227