

# Jordi Casas-Roma

Curriculum Vitae

#### Short Bio

Recently, he has finished his Ph.D on Computer Science by the Universitat Autònoma de Barcelona (UAB, 2014). Master on Advanced Artificial Intelligence (UNED, 2011) and Computer Science Engineer (UAB, 2002). From September 2009, he works as lecturer in the Department of Computer Science, Multimedia and Telecommunication (EIMT) in UOC. His teaching activities mainly concentrate in computer security and databases.

His main research scopes include the privacy-preservation in data and data mining in graph-formatted data (graph mining). Since 2010, he belongs to the research group KISON (K-ryptography and Information Security for Open Networks) where investigates the methods of anonymization in graph mining processes. From March to June 2014, he was visiting researcher at the Data Science and Mining (DaSciM) group at the Computer Science Laboratory (LIX) of École Polytechnique (Paris, France).

# Current positions

2009–Present Lecturer at the Department of Computer Science, Multimedia, and Telecommunication at the UOC.

2010–Present **Associate Researcher at KISON** (K-ryptography and Information Security for Open Networks).

#### Education

2012-Present **Ph.D on Computer Science**, in the Universitat Autònoma de Barcelona (UAB) directed by Jordi Herrera-Joancomartí and Vicenç Torra, Spain, Thesis: "Privacy-preserving and data utility in graph mining" awarded with cum laude.

2007–2011 M.S. Degree on Advanced Artificial Intelligence, in the Universidad Nacional de Educación a Distancia (UNED). Available here (in Spanish), Spain, Master's thesis awarded with honours.

1997–2002 B.S. Degree in Computer Science, *Universitat Autònoma de Barcelona (UAB)*, Spain.

## Experience

#### **Teaching**

2009-Present Assistant Lecturer in the Department of Computer Science and Multimedia at UOC.

Courses coordinated:

- Operating Systems (Computing and Telematics; 2009 currently)
- Computer Network Security (Computing and Telematics; 2009, 2011 currently)
- e-Commerce (Computing; 2011 currently)
- o Distributed Systems (Final Projects of Bachelor's in Computer Science; 2011 currently)
- Database design (Multimedia; 2010)
- Database applications (Multimedia, 2010)
- XML and Semantic Web (Final Projects of Bachelor's in Computer Science; 2010)
- Basic GNU/Linux Operating System (M.S. Degree in Free Software; 2009)
- Network Management and Operating Systems in Free Software Environments (M.S. Degree in Free Software; 2009)
- Security (Final Projects of M.S. Degree in Computer Security; 2009)
- Computer Security (Final Projects of Bachelor's in Computer Science; 2009)
- GNU/Linux (Final Projects of Bachelor's in Computer Science; 2009)

2004–2009 Assistant Professor ("Consultor") in the Computer Science degree at UOC. Courses given:

- Computer Network Security (UOC; 2004 2009)
- Markup Languages: XML (Summer University at the UOC; 2004, 2005 and 2006)
- Analysis of Social Network Data (UOC; 2013)

#### Research

2010-Present Associate Researcher at KISON (K-ryptography and Information Security for Open Networks).

2014 Visiting researcher at the DATA SCIENCE AND MINING (DaSciM) group at the Computer Science Laboratory (LIX) of École Polytechnique (Paris, France) from March to June 2014.

### **Publications**

Journal papers (indexed in ISI-JCR)

2014 J. Casas-Roma, J. Herrera-joancomartí and V. Torra. (2014). "Anonymizing Graphs: Measuring Quality for Clustering". Knowledge and Information Systems (KAIS), doi:10.1007/s10115-014-0774-7

#### Conferences and workshops

- J. Casas-Roma (2014). "Privacy-Preserving on Networks using Randomization and Edge-Relevance". In V. Torra, Y. Narukawa and Y. Endo, editors, Proceedings of the 11th International Conference on Modeling Decisions for Artificial Intelligence, volume 8825 of Lecture Notes in Artificial Intelligence, pp. 204-216. Berlin, Heidelberg, 2014. Springer Berlin Heidelberg.
- Casado, C.; Casas-Roma, J.; Córcoles, C. P.; Minguillón, J.; Peña, I. (2014). "Analyzing Learner's Participation in a WordPress-based Personal Teaching Environment".
  In: The Personal Learning Environments Conference. Tallinn, Estonia.
- 2013 Casas-Roma, J., Herrera-Joancomartí, J., Torra, V. (2013). "Analyzing the Impact of Edge Modifications on Networks". In The 10th International Conference on Modeling Decisions for Artificial Intelligence (pp. 296–307). Barcelona: Springer-Verlag, doi:10.1007/978-3-642-41550-0\_26
- 2013 Casas-Roma, J., Herrera-Joancomartí, J., Torra, V. (2013). "An Algorithm For k-Degree Anonymity On Large Networks". In The 2013 IEEE/ACM International Conference on Advances on Social Networks Analysis and Mining (pp. 671–675). Niagara Falls: IEEE, doi:10.1145/2492517.2492643
- 2012 Casas-Roma, J., Herrera-Joancomartí, J., Torra, V. (2012). "Comparing random-based and k-anonymity-based algorithms for graph anonymization". In the 9th International Conference on Modeling Decisions for Artificial Intelligence (pp. 197–209). Girona: Springer-Verlag. doi:10.1007/978-3-642-34620-0\_19
- 2012 Casas-Roma, J., Herrera-Joancomartí, J., Torra, V. (2012). "Algoritmos genéticos para la anonimización de grafos". XII Reunión Española sobre Criptología y Seguridad de la Información (RECSI 2012) (pp. 243–248). Donostia-San Sebastián, Spain.

#### **Books**

2013 Casas-Roma, J., Conesa Caralt, J. (2013). "Diseño conceptual de bases de datos en UML" (book in Spanish). Barcelona, Spain: Editorial UOC. 152 pp. ISBN: 978-84-9029-769-8.

#### Book chapters

- 2014 J. Casas-Roma, J. Herrera-Joancomartí and V. Torra. "A Summary of k-Degree Anonymous Methods for Privacy-Preserving on Networks". In G. Navarro-Arribas and V. Torra, editors, Advanced Research in Data Privacy, volume 567 of Studies in Computational Intelligence, pp. 231-249. Berlin, Heidelberg, 2015. Springer Berlin Heidelberg. doi:10.1007/978-3-319-09885-2\_13
- 2012 Casas-Roma, J. (2012). "Introducció al disseny de bases de dades" (book chapter in Catalan). Book: "Disseny de Bases de Dades". Barcelona, Spain: Editorial UOC. In press.
- 2012 Casas-Roma, J. (2012). "Disseny conceptual de bases de dades" (book chapter in Catalan). Book: "Disseny de Bases de Dades". Barcelona, Spain: Editorial UOC. In press.
- 2012 Casas-Roma, J. (2012). "Disseny físic de bases de dades" (book chapter in Catalan). Book: "Disseny de Bases de Dades". Barcelona, Spain: Editorial UOC. In press.

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2004 Casas-Roma, J. (2004). "Modelos de diseño de las TIC" (book chapter in Spanish). Barcelona, Spain: Editorial UOC. In press.

#### Scientific papers and reports, Teaching material, Newsletters and Theses

- 2013 Casas-Roma, J., Herrera-Joancomartí, J., Torra, V. (2013). "Evolutionary Algorithm for Graph Anonymization", 6. Databases. Available http://arxiv.org/abs/1310.0229.
- 2011 Casas-Roma, J. (2011). "Preservacion de la privacidad en procesos de minería de datos basados en grafos". Universidad Nacional de Educación a Distancia (UNED). Available here (in Spanish).

## Book, Journal and Conference paper reviewer

- September The 7th International Symposium on Foundations & Practice of Security (FPS 2014 2014).
- June 2014 Journal reviewer. "Transactions on Data Privacy" (TDP).
- April 2014 Conference reviewer. The 2014 IEEE/ACM International Conference on Advances in Social Network Analysis and Mining (ASONAM'14).
- April 2014 Conference reviewer. The 11th International Conference on Modeling Decisions for Artificial Intelligence (MDAI'14).
- March 2014 Book chapter. Springer: "Advanced Research in Data Privacy", volume 567 of Studies in Computational Intelligence.
  - February Book chapter. Extended versions of ASONAM 2013 papers. 2014
- October 2013 Journal reviewer. "IEEE Computational Intelligence Magazine" (CIM). (ISI-JCR).
- February Book reviewer. IGI book: "Organizational, Legal, and Technological Dimensions of Information System Administration". Chapter: "Information Security and Information Assurance. The Discussion about the Meaning, Scope and Goals".

# Organizing committee membership

2013 Local Organizing Committee of The 10th International Conference on Modeling Decisions for Artificial Intelligence (MDAI 2013).

#### Main research interests

- Data Privacy
- Social Network Analysis
- Security

- Data mining
- Network & Graph Theory