Curriculum vitæ

December, 2014

Personal Details

- Name: Jordi Nin Guerrero
- Place and date of birth: Barcelona (Spain), March 16th, 1979
- Current position: Tenure-track lecturer in the Computer Architecture Department of the Technical University of Catalonia (UPC-BarcelonaTECH)
- Office address: C\ Jordi Girona 1-3, D6-109, 08034 Barcelona, Catalonia, Spain
- Office phone: +34 93 401 6995
 Office fax: +34 93 401 7055
- e-mail address: nin@ac.upc.edu
- Web page: http://personals.ac.upc.edu/nin/
- Number of research 'sexenios': 1 (2005/10)
- Number of academic 'quinquenios': 1 (2007/14)

Summary of Research Indicators

- Awards: 2
- Ph.D. Theses Advised: 3 (0 completed, 3 in progress)
- M.Sc. and B.Sc. Theses Advised: 19
- Research projects and contracts: 12 (4 as principal investigator)
- Total number of publications: 66
 - Books as author: 1Books as editor: 3
 - Articles in ISI JCR journals: 16
 - Springer LNCS: 17Book chapters: 3
 - Articles in proceedings with ISBN: 18
 - Others 8
- Total number of citations (Google scholar, 1/12/14): 391
- Hirsch H-Index (Google scholar, 1/12/14): 10
- i10-Index (Google scholar, 1/12/14): 14
- Conference/Workshop general or program chair: 5
- Conference/Workshop program/organization committee: 15

Research Interests

- Big data analytics: Smart cities, clustering, stream mining, graph mining and k-NN
- Machine learning: Deep learning, bayesian learning, data integration, genetic algorithms, classification and time series
- Privacy-preserving data mining: Disclosure risk and microaggregation

Education and Accreditations

- Accredited by the Spanish National Agency for Quality Assessment and Accreditation (ANECA) as Associate Professor, July 2012 (In spanish: Profesor Titular de Universidad)
- Accredited by the Catalan Agency for University Quality (AQU) as Tenured Assistant Professor, september 2011. (In catalan: Professor Agregat.)
- Accredited by the Spanish National Agency for Quality Assessment and Accreditation (ANECA) as tenured Assistant Professor, July 2010 (In spanish: Profesor Contratado Doctor)
- Accredited by the Catalan Agency for University Quality (AQU) as Tenure-Track Lecturer, september 2008. (In catalan: Professor Lector.)
- Ph.D. in Computer Science, Autonomous University of Barcelona. Thesis title: Contributions to Record Linkage for Disclosure Risk Assessment. Advisor: Vicenç Torra i Reventós, ISBN: 978-84-691-6595-9, June 2008.
- Diploma of Advanced Studies (Master) in Computer Science, Autonomous University of Barcelona, July 2007.
- Master of science in Enginyer en Informática (computer science engineering, BAC+5), Autonomous University of Barcelona, July 2004.
- Bachelor of science in Enginyer Tècnic en Informàtica de Gestió (computer science technical engineering, BAC+3), Autonomous University of Barcelona, September 2002

Awards

- InnovaChallenge Big Data 1st Prize in Apps for Companies, from BBVA Bank for pear campaigns app (http://pear-campaigns.bsc.es). January 2015
- Outstanding PhD Award from the Computer Science Department of the Universitat Autònoma de Barcelona (UAB). 2008.

Grants

- From June 2009 to September 2010, I enjoyed a Marie Curie post-doctoral fellowship at Laboratoire d'Analyse et d'Architecture des Systèmes of CNRS, (LAAS-CNRS) for a postdoctoral training.
- From January 2007 to May 2009, I enjoyed an I3P fellowship from the Spanish Research Council (CSIC) for my PhD. Studies.

Positions

• From September 2013, associate researcher at the Barcelona Supercomputing Center, Centro Nacional de Supercomputación (BSC-CNS, http://www.bsc.es).

- From September 2010, tenure-track lecturer at the Technical University of Catalonia (School of Computer Science Engineering of Barcelona, FIB), as a member of the *Department of Computer Architecture* (http://www.ac.upc.edu).
- From June 2009 to September 2010, member of the research group *Tolérance aux fautes* et Sûreté de Fonctionnement informatique (see http://www.laas.fr/laas/1-4287-Groupe -TSF.php) of the Laboratoire d'Analyse et d'Architecture des Systèmes of CNRS, (LAAS-CNRS).
- From September 2007 to August 2010, part time associate professor at the Technical University of Catalonia (School of Computer Science Engineering of Barcelona, FIB), as a member of the Department of Computer Architecture.
- From January 2007 to May 2009, member of the research group Information Fusion for Privacy and Decision (see http://www.iiia.csic.es) of the Artificial Intelligence Research Institute of CSIC (IIIA-CSIC).
- From July 2006 to December 2006, member of the research group *Data Management* (see http://www.dama.upc.edu) of the Department of Computer Architecture of the Technical University of Catalonia.
- From September 2004 to June 2006, Ph.D. student of the research group *Information Fusion for Privacy and Decision* (see http://www.iiia.csic.es) of the Artificial Intelligence Research Institute of CSIC (IIIA-CSIC).

Research Activities

Research Publications

Books as Author

1. J. Nin, Contributions to Record Linkage for Disclosure Risk Assessment, Monografies de l'Institut d'Investigació en Intel·ligència Artificial. Vol. 40, ISBN: 978-84-00-08848-4, 2009.

Books as Editor

- J. Nin and D. Villatoro (Ed.), J. Nin and D. Villatoro (Ed.), Citisen in Sensor Networks ECCS Workshop, volume 8313, Lecture Notes of Artificial Intelligence Series, ISBN: 978-3-319-04177-3, 2014.
- J. Nin and D. Villatoro (Ed.), J. Nin and D. Villatoro (Ed.), Citisen in Sensor Networks ECAI Workshop, volume 7685, Lecture Notes of Artificial Intelligence Series, ISBN: 978-3-642-36073-2, Springer, 2013.
- J. Nin and J. Herranz (Ed.), Privacy and Anonymity in Information Management Systems, Advanced Information and Knowledge Processing Series, Springer, ISBN: 978-1-84996-237-7, 2010.

SCI Journal Publications

- J. Herranz and J. Nin, Secure and Efficient Anonymization of Distributed Confidential Databases. *International Journal of Information Security (IJIS)*, volume 13, pages 497-512, Springer, 2014. SCI index (2012):1.094.
- 2. J. Balasch-Masoliver, V. Muntés-Mulero and Jordi Nin, Using Genetic Algorithms for Attribute Grouping in Multivariate Microaggregation, Intelligent Data Analysis Journal (IDA), volume 18, issue 6, pages 819-836, IOS Press, 2014, SCI index (2012):0.500.

- 3. J. Nin, R. Tous and J. Delgado, Variable linkage for multimedia metadata schema matching, *Multimedia Tools and Applications*, volume 68, pages 845-861, Springer, 2014 **SCI index** (2012):1.014.
- 4. D. Rebollo-Mondedero, M. Solé, J. Nin and J. Forné, A Modification of the k-Means Method for Quasi-Unsupervised Learning, *Knowledge-Based Systems*, volume 37, pages 176-185, Elsevier, 2013. **SCI index (2012):2.422**.
- 5. J. Herranz, J. Nin and M. Solé, More Hybrid and Secure Protection of Statistical Datasets, *IEEE Transactions on Dependable and Secure Computing*, volume 9, issue 5, pages 727-740, IEEE Press, 2012 **SCI index (2012):1.409**.
- M. Solé, V. Muntés-Mulero, J. Nin, Efficient Microaggregation Techniques for Large Numerical Data Volumes, *International Journal of Information Security (IJIS)*, volume 11, pages 253-267, Springer, 2012. SCI index (2012):1.094.
- 7. J. Herranz, J. Nin and M. Solé, Kd-trees and the real disclosure risks of large statistical databases. *Information Fusion (IF)*, volume 13, issue 4, pages 260-273, Elsevier., 2012. **SCI index (2012):2.212**.
- 8. J. Herranz, J. Nin and M. Solé, Optimal Symbol Alignment Distance: A New Distance for Sequences of Symbols. *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, volume 23, issue 10, pages 1541-1554, IEEE Press, 2011. **SCI index (2011):2.236**.
- 9. J. Herranz, S. Matwin, J. Nin and V. Torra, Classifying Data from Protected Statistical Datasets. *Computers and Security (COSE)*, Elsevier, volume 29, issue 8, pages 875-890, 2010. **SCI index (2010):1.488**.
- 10. J. Nin, A. Laurent and P. Poncelet, Speed Up Gradual Rule Mining from Stream Data! A B-Tree and OWA-based Approach. *Journal of Intelligent Information Systems (JIIS)*, Springer, Volume 35, Number 3, pages 447-463, 2010. **SCI index (2010):1.078**.
- 11. J. Nin and V. Torra, Towards The Evaluation of Time Series Protection Methods. *Information Sciences (IS)*, Elsevier, volume 179, issue 11, pages 1663-1677, 2009. **SCI index (2009):3.095**.
- 12. J. Nin and V. Torra, Analysis of the Univariate Microaggregation Disclosure Risk. New Generation Computing (NGC), Ohmsha-Springer, volume 27, pages 177-194, 2009. SCI index (2009):0.854.
- 13. J. Nin, J. Herranz and V. Torra, On the Disclosure Risk of Multivariate Microaggregation. *Data and Knowledge Engineering (DKE)*, Elsevier, volume 67, issue 3, pages 399-412, 2008. **SCI index (2008):1.480**.
- 14. J. Nin, J. Herranz and V. Torra, How to Group Attributes in Multivariate Microaggregation. International Journal on Uncertainty, Fuzziness and Knowledge-Based Systems (IJUFKS), World Scientific publishing, volume 16, issue 1, pages 121-138, 2008. SCI index (2008):1.000.
- 15. V. Torra and J. Nin, Record linkage for database integration using fuzzy integrals. *International Journal of Intelligent Systems (IJIS)*, Wiley Publishers, volume 23, issue 6, pages 715-734, 2008. **SCI index (2008):0.429**.
- J. Nin, J. Herranz and V. Torra, Rethinking Rank Swapping to Decrease Disclosure Risk. Data and Knowledge Engineering (DKE), Elsevier, volume 64, issue 1, pages 346-364, 2008.
 SCI index (2008):1.367.

Lecture Notes in Computer Science and in Artificial Intelligence

- 1. D. Cea, J. Nin, R. Tous, J. Torres, E. Ayguade, Towards the Cloudification of the Social Networks Analytics, In *Modeling Decisions for Artificial Intelligence (MDAI)*, Lecture Notes in Artificial Intelligence, in press, 2014.
- 2. J. Nin, Beyond Multivariate Microaggregation for Large Record Anonymization, In Second

- Int. Workshop on Citizen Sensor Networks, volume 8313 of Lecture Notes in Artificial Intelligence, pages 87-107, 2014.
- 3. J. Nin, D. Carrera and D. Villatoro, On the Use of Social Trajectory-based Clustering Methods for Public Transport Optimization, In Second Int. Workshop on Citizen Sensor Networks, volume 8313 of Lecture Notes in Artificial Intelligence, pages 59-70, 2014.
- 4. D. Villatoro and J. Nin, Citizens Sensor Networks, In First Int. Workshop on Citizen Sensor Networks, volume 7685 of Lecture Notes in Artificial Intelligence, pages 1-7. Springer, 2013.
- R. Tous, J. Nin, J. Delgado and P. Toran. Approaches and Standards for Metadata Interoperability in Distributed Image Search&Retrieval, In Int. Conference on Database and Expert Systems Applications (DEXA), volume 6861 of Lecture Notes in Computer Sciences, pages 234-248. Springer, 2011.
- J. Nin, J. Herranz and V. Torra, Using Classification Metrics For Attribute Disclosure Risk Evaluation, In Modeling Decisions for Artificial Intelligence (MDAI), volume 6408 of Lecture Notes in Artificial Intelligence, pages 277-286. Springer, 2010.
- J. Herranz, J. Nin and V. Torra. Distributed Privacy-Preserving Methods for Statistical Disclosure Control, In *Int. Workshop on Data Privacy Management*, volume 5939 of *Lecture Notes in Computer Sciences*, Springer, pages 33-47, 2009.
- 8. J. Nin and J. Herranz. Partial Symbol Ordering Distance, In *Modeling Decisions for Artificial Intelligence (MDAI)*, volume 5861 of *Lecture Notes in Artificial Intelligence*, pages 293-302, Springer. 2009.
- 9. J. Guisado-Gámez, A. Prat-Pérez, J. Nin, V. Muntés-Mulero and J. Larriba-Pey, Parallelizing Record Linkage for Disclosure Risk Assessment. In *Privacy in Statistical Databases (PSD)*, volume 5262 of *Lecture Notes in Computer Science*, pages 190-202. Springer, 2008.
- J. Nin, J. Herranz and V. Torra, Towards a More Realistic Disclosure Risk Assessment. In Privacy in Statistical Databases (PSD), volume 5262 of Lecture Notes in Computer Science, pages 152-165. Springer, 2008.
- J. Pont-Tuset, J. Nin, P. Medrano-Gracia, J. Larriba-Pey and V. Muntés-Mulero. Improving Microaggregation for Complex Record Anonymization, In *Modeling Decisions for Artificial Intelligence (MDAI)*, volume 5285 of *Lecture Notes in Artificial Intelligence*, pages 215-226. Springer, 2008.
- 12. J. Pont-Tuset, P. Medrano-Gracia, J. Nin, J. Larriba-Pey and V. Muntés-Mulero, ONN the use of neural networks for data privacy, In *Current Trends in Theory and Practice of Computer Science (SOFSEM)*, volume 4910 of *Lecture Notes in Computer Science*, pages 634-645. Springer, 2008. (acceptance rate, 35.1%).
- 13. P. Medrano-Gracia, J. Pont-Tuset, J. Nin and V. Muntés-Mulero, Ordered data set vectorization for linear regression on data privacy. In *Modeling Decisions for Artificial Intelligence* (MDAI), volume 4617 of Lecture Notes in Artificial Intelligence, pages 361-372. Springer, 2007. (acceptance rate, 21.7%).
- 14. J. Nin and V. Torra, Distance based re-identification for time series, Analysis of distances. In *Privacy in Statistical Databases (PSD)*, volume 4302 of *Lecture Notes in Computer Science*, pages 205-216. Springer, 2006.
- 15. J. Nin and V. Torra, Extending microaggregation procedures for time series protection. In Rough Set and Soft Computation Society (RSCTC), volume 4259 of Lecture Notes in Computer Science, pages 899-908. Springer, 2006. (acceptance rate, 27.4%).
- 16. J. Nin and V. Torra, New approach to re-identification problem using neural networks. In Modeling Decisions for Artificial Intelligence (MDAI), volume 3885 of Lecture Notes in Artificial Intelligence, pages 356-267. Springer, 2006. (acceptance rate, 31.9%).
- 17. J. Nin and V. Torra, Empirical analysis of database privacy using twofold integrals. In Compu-

tational Intelligence and Security (CIS), volume 3801 of Lecture Notes in Artificial Intelligence, pages 1 - 8. Springer, 2005. (acceptance rate, 19.89%).

Book Chapters

- 1. S. Matwin, J. Nin, M. Sehatkar and T. Szapiro, A Review for Attribute Disclosure Control. In *Advanced Research in Data Privacy*, Springer, in press, 2014.
- 2. J. Herranz, J. Nin, Introduction to privacy and anonymity in information management systems. In *Privacy and anonymity in information management systems: new techniques for new practical problems, Advanced Information and Knowledge Processing Series*, Springer, ISBN: 978-1-84996-237-7, pages: 3-6, 2010.
- J. Pont-Tuset, J. Nin, P. Medrano-Gracia, V. Muntés-Mulero and J. Larriba-Pey, Desemantization for Numerical Microdata Anonymization. In Advances in Artificial Intelligence for Privacy Protection and Security, World Scientific publishing, ISBN: 981-279-032-2, volume 1, pages 81-115, 2009.

International Conferences with ISBN

- 1. D. Sánchez-Charles, V. Muntés-Mulero, M. Solé and J. Nin, CrowdWON: A Modelling Language for Crowd Processes based on Workflow Nets, in *Proceedings of the Association for the Advancement of Artificial Intelligence conference (AAAI)*, in press 2015. (acceptance rate, 26.6%).
- F. Guttler, S. Alleaume, C. Corbane, D. Ienco, J. Nin, P. Poncelet, M. Teisseire, Exploring High Repetitivity Remote Sensing Time Series For Mapping And Monitoring Natural Habitats A New Approach Combining Obia And K-Partite Graphs, in *Proceedings of the Int. Geoscience and Remote Sensing Symposium (IGARSS)*, ISBN: 978-1-4799-5775-0, pages 3930-3933, 2014.
- 3. F. Guttler, D. Ienco, M. Teisseire, J. Nin and P. Poncelet, Towards the Use of Sequential Patterns for Detection and Characterization of Natural and Agricultural Areas, in 15th Int. Conf. on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU), Communications in Computer and Information Science (CCIS), volume 442, pages 97-106, 2014.
- 4. D. Sánchez-Charles, J. Nin, M. Solé and V. Muntés-Mulero, Worker Ranking Determination in Crowdsourcing Platforms using Aggregation Functions, in *Proceedings of the IEEE World Conf. in Computer Intelligence (WCCI)*, ISBN: 978-1-4799-2072-3, pages 1801-1808, 2014.
- J. Nin, S. Ricciardi, Digital Watermarking Techniques and Security Issues in the Information and Communication Society, accepted for publication in *Proceedings of the 27th IEEE Int. Conf. on Advanced Information Networking and Applications (AINA)*, ISBN: 978-0-7695-4952-1/13, pages 1553-1558, 2013.
- B. Peterson, S. Ricciardi and J. Nin, Energy-efficiency and Security Issues in the Cisco Nexus Virtual Distributed Switching, The Sixth Int. Conf. on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS), ISBN: 978-1-4673-1328-5, 2012.
- J. Nin and V. Torra, Possibilistic Reasoning for Trust-based Access Control Enforcement in Social Networks, in *Proceedings of the IEEE World Conf. in Computer Intelligence (WCCI)*, ISBN: 978-1-4244-6919-2, pages 1-6, 2010.
- 8. V. Muntés and J. Nin, Privacy and Anonymization for Very Large Datasets, In *Proceedings of the 18th ACM International Conference on Information and knowledge Management (CIKM)*, ISBN: 978-1-60558-512-3, pages 2117-2118, 2009.
- 9. J. Nin, P. Salle, S. Bringay and M. Teisseire, Using OWA Operators for Gene Sequential

- Pattern Clustering. In Proceedings of the 22nd IEEE International Symposium on Computer-Based Medical Systems (CBMS), ISBN: 978-1-4244-4878-4, pages 1-4, 2009.
- J. Nin, B. Carminati, E. Ferrari and V. Torra, Computing Reputation for Collaborative Private Networks. In *Proceedings of the 33rd IEEE International Computer Software and Applications Conference (COMPSAC)*, ISBN: 978-0-7695-3726-9, pages 246-253, 2009. (acceptance rate, 20%).
- A. Valls and J. Nin and V. Torra, On the use of aggregation operators for location privacy. In Proceedings of the European Society on Fuzzy Logic and Technologies (EUSFLAT), ISBN:978-989-95079-6-8, pages 489-494, 2009.
- J. Nin and V. Torra, Modeling projections in microaggregation. In Proceedings of 12th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU), ISBN:978-1-59593-965-4, pages 51-60, 2008.
- J. Nin, J. Herranz and V. Torra, Attribute selection in multivariate microaggregation. In Post-Proceedings of 11th ACM International Conference on Extending Database Technology (EDBT), ISBN:978-1-59593-965-4, pages 51-60, 2008.
- N. Martínez-Bazán, V. Muntés-Mulero, S. Gómez-Villamor, J. Nin, M. Sánchez-Marínez and J. Larriba-Pey, DEX: High-Performance Exploration on Large Graphs for Information Retrieval, In *Proceedings of 16th ACM Conference on Information and Knowledge Management* (CIKM), ISBN: 978-59593-9, pages: 573-582, 2007. (acceptance rate, 17%).
- 15. J. Nin, J. Pont-Tuset, P. Medrano-Gracia, J. Larriba-Pey and V. Muntés-Mulero, Increasing polynomial regression complexity for data anonymization. In *Proceedings of IEEE International Conference on Intelligent Pervasive Computing (IPC)*, ISBN: 0-7695-3006-0, pages 29-34, 2007.
- 16. J. Nin, V. Muntés-Mulero, N. Martínez-Bazán and J. Larriba-Pey, On the use of semantic blocking techniques for data cleansing and integration. In *Proceedings of IEEE Eleventh International Database Engineering and Applications Symposium (IDEAS)*, ISBN: 0-7695-2947-X, pages 190-198, 2007. (acceptance rate, 31.5%).
- J. Nin and V. Torra, Blocking anonymized data. In Proceedings of the 4th International Summer School on Aggregation Operators (AGOP), ISBN: 978-90-382-1140-4, pages 83-87, 2007.
- J. Nin and V. Torra, Towards the use of OWA operators for record linkage. In Proceedings of the European Society on Fuzzy Logic and Technologies (EUSFLAT), ISBN: 84-7653-872-3, pages 34-39, 2005

International Conferences without ISBN

- 1. J. Nin, J. Herranz and V. Torra, On method-specific record linkage for risk assessment, Proceedings of Joint UNECE/Eurostat work session on statistical data confidentiality, 2007.
- J. Nin and V. Torra, Fuzzy measures and integrals in re-identification problems. In Proceedings Of International Symposium on Nonlinear Theory and its Applications (NOLTA), CD-ROM, 2006.

Publications in Spanish Conferences

- 1. J. Herranz, S. Matwin, P. Meseguer and J. Nin, A Cryptographic Solution for Private Distributed Simple Meeting Scheduling. In *Proceedings of the International conference of catalan artificial intelligence society (CCIA)*, ISBN: 978-1-60750-061-2, pages 275 283, 2009
- 2. J. Nin, J. Pont-Tuset, P. Medrano-Gracia, J. Larriba-Pey and V. Muntés-Mulero, Anonymizing Data via polynomial regression. In *Proceedings of the Computer Science Spanish con-*

ference (CEDI). II Simposio sobre seguridad informática, ISBN: 978-84-9732-607-0, pages 19-26, 2007.

3. J. Nin, V. Muntés-Mulero, N. Martínez-Bazán and J. Larriba-Pey, Semantic blocking for record linkage. In *Proceedings of the International conference of catalan artificial intelligence society (CCIA)*, ISBN: 0922-6389, pages 141-149, 2007.

Technical Reports

- 1. J. Nin, B. Carminati, E. Ferrari and V. Torra, Dynamic reputation-based trust computation in private networks, *Technical Report IIIA-TR-2009-02*.
- 2. J., Pont-Tuset, P. Medrano-Gracia, J. Nin, J. Larriba-Pey and V. Muntés-Mulero, Parameter Determination of ONN (Ordered Neural Networks), *Technical Report IIIA-TR-2007-05*.

Other Dissemination Activities

1. J. Nin, D. Cea. Hermes: Distributed social network monitoring system. NoSQL matters Barcelona. 2014.

Public Research Projects

Project title: Models de Programacio i Entorns d'eXecució PARal.lels (AMPEXPAR)

Entity: AGAUR (SGR 1051)

From: 2014 to: 2016

Main researcher: Eduard Ayguadé

Participants: BSC, UPC Funds: 80,000 euros

Project title: Analysis of Massive Data on Earth and Universe Science (AMADEUS)

Entity: CNRS - Appel à projet MASTODONS

From: 2012 to: 2017

Main researcher: Sofian Maabout

Participants: LaBRI, LIRMM-CNRS, LIF, ESPACE-DEV, CEREGE, LAM, Trent University

Funds: 70,000 euros

Project title: Protection, search and interoperability of multimedia content: New techniques and

applications (PBInt)

Entity: Spanish Ministry of Education and Science (TEC2011-22989)

From: 2012 to: 2014

Main researcher: Jaime Delgado Merce

Participants: UPC Funds: 52,000 euros

Project title: Multimedia Content Life Cycle Management (MCM-LC)
Entity: Spanish Ministry of Education and Science (TEC2008-06692-C02-01)

From: 2009 to: 2011

Main researcher: Jaime Delgado Merce

Participants: UPC, UPF Funds: 98,736.00 euros Project title: Feel@Home, Full Extended Experience of living at Home

Entity: Celtic-Eureka (CP5-008)

From: 2008 to: 2010

Main researcher: Romain Carbou

Participants: France Telecom R&D, Ikerlan, Creativ IT, Nomovik Ltd., CNRS, Telefonica I+D,

Energy System Soyntec, University of Malaga, Telecom Management Sud Paris

Funds: 6,300,000.00 euros

Project title: Advanced Research on Information Security and Privacy (ARES)
Entity: Spanish Ministry of Education and Science (Research Programme 21302)

From: 2007 to: 2012

Coordinator: Josep Domingo (URV)
Main researcher: Vicenç Torra

Participants: IIIA-CSIC, U. Rovira i Virgili, UOC, UPC, U. Malaga, UIB

Funds: 5,458,000.00 euros

Project title: Escudo electrónico para conciliar la privacidad de los consumidores y la seguridad de las transacciones en la sociedad de la información: Privacidad en bases de datos (e-AEGIS/DB-privacy)

privacy)

Entity: Spanish Ministry of Education and Science (TSI2007-65406-C03-02)

From: 2007 to: 2012

Main researcher: Vicenç Torra

Participants: IIIA-CSIC, U. Rovira i Virgili, UOC

Funds: 51,000.00 euros

Project title: Protección de la propiedad intelectual y privacidad en multicast sobre redes moviles

ad-hoc: profiling y evaluación de privacidad (Propiertas)

Entity: Spanish Ministry of Education and Science (SEG2004-04352-C04-02)

From: 2004 to: 2007

Coordinator: Josep Domingo (URV)
Main researcher: Vicenç Torra (CSIC)

Participants: IIIA-CSIC, U. Rovira i Virgili, UOC

Funds: 28,000.00 euros

Industrial Projects

Project title: Crowd Computing IV

Company: CA Inc. From: 2014 to: 2015 Main researcher: Jordi Nin Participants: UPC, CA Labs

Funds: 40,00.00 euros

Project title: Risk and cost-based analysis and recommendation for application deployment in fu-

ture clouds

Company: CA Inc. From: 2014 to: 2015 Main researcher: Jordi Nin Participants: BSC, CA Labs Funds: 100,000 euros

Project title: CrowdScout, a new crowd-platform

Company: CA Inc. From: 2013 to: 2014 Main researcher: Jordi Nin Participants: UPC, CA Labs Funds: 88,172.00 euros

Project title: Fraud detection mechanism for crowdsourcing platforms in industry

Company: CA Inc. From: 2013 to: 2014 Main researcher: Jordi Nin

Participants: UPC, CA Labs Funds: 116,000.00 euros

Membership Committees

Chair Committee

- Program Co-Chair (with D. Villatoro, J. Ramasco, O. Cantú, I. Galloso), 3rd Int. Workshop on Citizen Networks (CITINEN'2014), in conjunction with the European Conference on Complex Systems (ECCS2014), September 25, 2014. Lucca, Italy.
- Track co-Chair of Track 'Knowledge Discovery and Data Mining', IEEE 5th Int. Conf. on Emerging Intelligent Data and Web Technologies (EIDWT), September 10-12, 2014 in Salerno, Italy.
- 3. Program Co-Chair (with D. Villatoro), 2nd Int. Workshop on Citizen Sensor Networks (CITI-SEN'2013), in conjunction with the European Conference on Complex Systems (ECCS2013), September 16, 2013. Barcelona, Spain.
- 4. Program Co-Chair (with D. Villatoro), 1st Int. Workshop on Citizen Sensor Networks (CI-TISEN'2012), in conjunction with the 20th European Conference on Artificial Intelligence (ECAI2012), August 27, 2012. Montpellier, France.
- Program Co-Chair (with V. Muntés-Mulero), ACM 1st Int. Workshop on Privacy and Anonymity for Very Large Datasets (PAVLAD'2009), in conjunction with the 18th ACM Conf. on Information and Knowledge Management (CIKM'2009), November 6, 2009. Hong Kong, China.

Technical Program Committee

- 1. 29th AAAI Conference on Artificial Intelligence, January 25-29, 2015, Austin Texas, USA.
- 2. The 1st International Conference on Predictive APIs and Apps, November 17th 18th, 2014. Barcelona, Spain
- 3. IEEE International Conference on Data Science and Advanced Analytics, October 30- November 1, 2014. Shangai, China.
- 4. 7th International Symposium On Fundations & Practice of Security (FPS), November 3-5, 2014. Montreal, Canada.
- Information Management and Big Data (SIMBig), September 8th-10th, 2014, 2014. Cusco, Peru.

- 6. IEEE World Congress on Computational Intelligence (IEEE WCCI), June 6 June 11, 2014. Beijing, China.
- 31th ICML International Conference on Machine Learning, June 21 June 26, 2014. Beijing, China.
- 8. 6th International Symposium On Fundations & Practice of Security (FPS), October 21-22, 2013. La Rochelle, France.
- 9. 3rd IFIP International Workshop on Security and Cognitive Informatics for Homeland Defense (SeCIHD'13), September 2-6, 2013. Regensburg, Germany
- 30th ICML International Conference on Machine Learning, June 16 June 21, 2013. Atlanta, USA.
- 11. 4th EIDWT International Conference on Emerging Intelligent Data and Web Technologies, September 9-11, 2013. Xian, China
- 12. 5th International Symposium on Foundations & Practice of Security (FPS), October 25-26, 2012. Montreal, Canada.
- 7th DPM International Workshop on Data Privacy Management, September 13-14, 2012.
 Pisa, Italy.
- 14. 29th ICML International Conference on Machine Learning, June 26 July 1, 2012. Edinburgh, Scotland.
- 15. 6th DPM International Workshop on Data Privacy Management, September 15-16, 2011. Leuven, Belgium.

Research Stays

- 1. June August 2013, Laboratoire d'Informatique, de Robotique et de Microélectronique de Montpellier (LIRMM), Centre national de la recherche scientifique (CNRS), Montpellier, France.
- 2. July August 2012, School of Electrical Engineering and Computer Science (SITE), University of Ottawa (uOttawa), Ottawa, Canada.
- 3. January April 2009, Laboratoire d'Informatique, de Robotique et de Microélectronique de Montpellier (LIRMM), Centre national de la recherche scientifique (CNRS), Montpellier, France.
- 4. January February 2008, Department of Computer Science and Communication (DICOM), University of Insubria, Varese, Italy.

Teaching and management activities

PhD. Theses Advised

- 1. David Sánchez-Charles, Fraud Detection Mechanisms in Crowdsourcing Platforms. Technical University of Catalonia (UPC), Doctoral Programme in Computer Architecture. Ongoing. Co-advisor with Victor Muntés-Mulero (CA Labs).
- 2. Joan Capdevila Pujol, Mining The SmartCity's Bigdata to Measure and Forecast the Socio-economic Impact of Events. Technical University of Catalonia (UPC), Doctoral Programme in Computer Architecture. Ongoing. Co-advisor with Jordi Torres (UPC-BSC).
- 3. Jose Alejando Cordero Rama, *Deep Learning Methods for Feature Extraction*. Technical University of Catalonia (UPC), Doctoral Programme in Computer Architecture. Ongoing. Coadvisor with Jordi Torres (UPC-BSC).

Master's and Bachelor's Theses Advised

- 1. Daniel Balastegui, Bachelor of Science in Computer Sciences Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Plataforma web para el desarrollo de aplicaciones Biq Data con Apache Spark, ongoing
- 2. David Martínez, Bachelor of Science in Computer Sciences Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Implementing privacy-preserving filters in the MOA stream mining framework, ongoing
- 3. Marc Benet Soro, Bachelor of Science in Computer Systems Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: FourSquares Crawler, on going.
- 4. Cristian Tomé, Bachelor of Science in Computer Systems Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Attribute Based Encryption Protocols for Private Big Data Storage in Public Cloud Systems, ongoing.
- Daniel Alemany Carrasco, Bachelor of Science in Computer Sciences Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Intranet CFIS, December 2014.
- Jordi Reina Molina, Bachelor Degree in Informatics Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Foodstagram, June 2014.
- 7. Oriol Pericas Arriola, Bachelor Degree in Informatics Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Desenvolupament d'una eina de branding a Twitter, June 2014.
- 8. Daniel Cea Royes, Bachelor Degree in Informatics Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Hermes: Distributed social network monitoring system, June 2014.
- 9. Jordi Aranda Flores, Bachelor of Science in Computer Sciences Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Cicerone: Implementació d'un Recomendador Social i Geoposicionat amb Sensat Participatiu, December 2013.
- 10. Pablo Rodriguez Fernandez, Bachelor of Science in Computer Sciences Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Hadoop Implementation of the Hungarian Algorithm for very large data linkage, June 2013.
- 11. David Lopez Padilla, Bachelor of Science in Computer Sciences Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: *Abiquo Provisioning Portal*, January 2013.
- 12. Jacint Fabregas Sole, Bachelor of Science in Computer Systems Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Cercador de punts d'interes amb Goggle Latitude, June 2012.
- 13. Raul Sanchez Delgado, Bachelor of Science in Computer Systems Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: *Aplicació geo-localització Forns IGP amb iOS / Android*, June 2012.
- 14. Benjamin D. Peterson, Master in Sustainability, Technology and Innovation, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Security Implications of the Nexus 1000V, April 2012.
- 15. Ruben Martinez, Bachelor of Science in Computer Systems Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title:

- Central Key Manager for Tango/04, January 2012.
- 16. Xavier Piñol, Bachelor of Science in Computer Sciences Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Aplicació de gestió i compartició multimedia en iOS basat en Cloud Computing, November 2011.
- 17. Jordi Balasch, Master of Science in Computer Sciences Engineering, School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Title: Using Genetic Algorithms for Attribute Grouping in Multivariate Microaggregation, December of 2009.
- 18. Jordi Pont, Master of Science in Telecommunications Engineering, Technical School of Telecommunications Engineering of Barcelona (ETSETB) of the Technical University of Catalonia (UPC). Title: *Una Nova Metodologia d'Anonimització de Microdades Numèriques*, June of 2008.

Subjects Taught

- Seguridad Informática, bachelor in Computer Sciences Engineering. School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Years: 2011-2015.
- Security in Information Technology Systems, master in Computer Architecture, Networks and Systems (CANS). School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Years: 2010-11, 2012-2014.
- Seguridad en Sistemas Informáticos, bachelor in Computer Sciences Engineering. School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Years: 2010-2012.
- Redes de Computadores, bachelor in Computer Sciences Engineering. School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC). Years: 2007-2012, 2014/15.

Academic Publications

- 1. M. García-Cervigón Gutiérrez, J. Nin, Á. Toribio González, Security in Information Systems: Laboratory Booklet, ISBN: 978-84-614-8362-4, pages: 101, 2011.
- 2. J. Nin, Security in Information Systems: Problem Set, ISBN: 978-84-614-8363-1, pages: 12, 2011
- 3. J. Nin, Security in Information Systems: Lecture Notes in Network Security, pages: 66, 2011.
- J. Nin, Security in Information Systems: Lecture Notes in Cryptography and PKI, pages: 78, 2011.

Innovation Academic Projects

Project title: Actividades de auto-aprendizaje para redes de computadores

Entity: AGAUR (MQD 2010 JD069383)

From: 2011 to: 2012

Main researcher: Jaime Delgado Mercé

Participants: UPC Funds: 6,000.00 euros

Participation in Academic Couses and Seminaries

- 1. Programa de Formación Inicial del profesorado (ProFI). Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 150 hours. From February 2011 to June 2012.
- 2. Elaboración del dosier docente (Porfolio docente). Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 20 hours. February/May 2012.
- 3. Utilización de les encuestas per a la mejora continuada. Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 8 hours. October 2011.
- 4. Introducción al dosier docent (Porfolio docente). Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 8 hours. September 2011.
- 5. Evaluación y análisis de los instrumentos de evaluación. Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 12 hours. September 2011.
- 6. La evaluación del aprendizaje. Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 8 hours. June 2011.
- 7. Formación, innovación y experiencia docente. Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 4 hours. June 2011.
- 8. Ensayo de una experiencia de aprendizaje activo. Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 20 hours. February/May 2011.
- 9. Como hablar mejor en público. Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 8 hours. February 2011.
- 10. Como aprenden nuestros estudiantes. Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 8 hours. February 2011.
- 11. Metodologias activas para el desarrollo del aprendizaje. Institut de Ciències de l'Educació (ICE) at Technical University of Catalonia (UPC). 8 hours. February 2011.

University Management Tasks

- Member of the Board of the Department of Computer Architecture of the Technical University of Catalonia from January 2014.
- Coordinator of the Master in Computer Sciences Engineering subject 'Computer Security', School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC) from September 2012.
- Coordinator of the bachelor in Computer Sciences Engineering subject 'Seguridad en Sistemas Informáticos', School of Computer Science Engineering of Barcelona (FIB), Technical University of Catalonia (UPC) from February 2011 to January 2012.
- Member of the Council of the Department of Computer Architecture of the Technical University of Catalonia from September 2010.

Work Experience

- System administrator at Montagud Editores, S.A., Barcelona, during 5 years (2001-2006).
- Software Engineer at Logic Control, S.A., Sabadell, during 6 months (2001).
- Accountant at Industrial Kern, S.A., Barcelona, during 2 anys (1999-2000).
- Shop assistant at Ikea, Badalona, during 1 year (1998).