

# Curriculum vitae

## PERSONAL INFORMATION



**Andrea Vinci** – Software and System Engineer  
Ph.D in System Engineering and Computer Science

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✉ **Personal:** [me@andreavinci.it](mailto:me@andreavinci.it)  
**Work:** [andrea.vinci@icar.cnr.it](mailto:andrea.vinci@icar.cnr.it)  
**Italian PEC:** [vinci.andrea@pec.it](mailto:vinci.andrea@pec.it)  
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🗣 **Google Hangout** [andrea.v84@gmail.com](mailto:andrea.v84@gmail.com)

Sex Male | Date of birth 13/11/1984 | Nationality Italian

## SHORT BIO

Andrea Vinci, Ph.D, has been a postdoctoral researcher since January 2016 at ICAR-CNR, where he has worked with various positions from September 2012. He earned a Ph.D in System Engineering and Computer Science at the University of Calabria (Italy), where he also earned a Master's degree in Computer Engineering (summa cum laude).

His research work mainly focuses on Internet of Things and Cyber-Physical Systems. In these areas, he has published works on the definitions of platforms and methodologies for the design and implementation of cyber-physical systems, on distributed algorithms for the efficient control of urban infrastructure such as drainage networks, based on swarm intelligence and peer-to-peer techniques, and on Data Mining techniques for Ambient Intelligence.

He has participated in research projects, such as iAmica, ResNovae and Domus. Among the various activities, he has contributed to the design, the development and the deployment of the demo Smart Street Cosenza, which is a prototype of pervasive ICT infrastructure for Smart City Services built in Cosenza, Italy, and to the design and the development of the social and pervasive, agent-based platform called iSapiens, which constitutes the main block of the Domus research project.

During his education, he wrote his bachelor's degree thesis on query optimization for RDBMS, his master's degree thesis on parallel data stream mining algorithms for general purpose GPU computing and his Ph.D thesis discussing an agent-based, cloud assisted framework for developing Cyber-Physical Systems.

## WORK EXPERIENCE

15 JAN 2016–PRESENT

### Researcher

National Research Council of Italy,  
Institute for High Performance Computing and Networking (ICAR-CNR)  
Via P. Bucci, cubo 7/11C, 87036 Rende (Cosenza) (Italy)  
<http://www.icar.cnr.it/>

Research and development on: Smart Cities, Cyber-Physical Systems, Internet of Things, Data Mining, Distributed Systems

**Business or sector** Information and communication

1 MAR 2014–14 JAN 2016

### Research Fellow

National Research Council of Italy,  
Institute for High Performance Computing and Networking (ICAR-CNR)  
Via P. Bucci, cubo 7/11C, 87036 Rende (Cosenza) (Italy)  
<http://www.icar.cnr.it/>

Research and development on: Data Mining, Smart Cities, GPU Computing, Cyber-Physical Systems, Internet of Things

**Business or sector** Information and communication

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- 15 SEP 2012–28 FEB 2014 **Research grant holder**  
 National Research Council of Italy,  
 Institute for High Performance Computing and Networking (ICAR-CNR)  
 Via P. Bucci, cubo 7/11C, 87036 Rende (Cosenza) (Italy)  
<http://www.icar.cnr.it/>  
 Research and development on: Cyber-Physical Systems, Agent-Based Systems and GPU computing.  
**Business or sector** Information and communication

## EDUCATION AND TRAINING

- 1 NOV 2012 - 19 FEB 2016 **Ph.D in Systems Engineering and Computer Science** EQF Level 8  
 University of Calabria  
 Via P. Bucci, 87036 Arcavacata Di Rende, Cosenza (Italy)  
<http://www.unical.it>  
  - Research and development of innovative ICT solutions.
  - Design and development of distributed and parallel algorithm.
  - Design of complex systems.**Thesis on:** A Cloud-Assited, Agent-Based Framework for Cyber-Physical Systems.
- 1 JAN 2009 - 17 JUL 2012 **Master's Degree in Computer engineering** EQF Level 7  
 University of Calabria  
 Via P. Bucci, 87036 Arcavacata di Rende, Cosenza (Italy)  
<http://www.unical.it>  
**Evaluation:** summa cum laude.  
**Thesis on:** a parallel, bio-inspired algorithm for clustering evolving data stream on GPU (CUDA) architecture.
- 16 SEP 2003 - 15 DEC 08 **Bachelor's Degree in Computer engineering** EQF Level 6  
 University of Calabria  
 Via P. Bucci, 87036 Arcavacata di Rende, Cosenza (Italy)  
<http://www.unical.it>  
**Evaluation:** 106/110.  
**Thesis on:** Structural query optimization based on hypertree decomposition and analysis of the MySQL query optimizer.
- 15 SEP 1998 - 16 JUL 2003 **High school leaving qualification in classical studies** EQF Level 4  
 Liceo Ginnasio Statale "Michele Morelli", Vibo Valentia (Italy)  
**Evaluation:** 100/100

## PERSONAL SKILLS

MOTHER TONGUE Italian

## OTHER LANGUAGE

	UNDERSTANDING		SPEAKING		WRITING
	LISTENING	READING	SPOKEN INTERACTION	SPOKEN PRODUCTION	
English	C1	C1	B2	B2	C1
First Certificate in English (B2 Upper), issued by the University of Cambridge on September 2013					
Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user					
Common European Framework of Reference for Languages					

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## JOB-RELATED SKILLS

- Good command on use, configuration and maintenance of networks and operating systems, **Linux** and **Windows**, acquired in the workplace, education and leisure.
- Good proficiency in the use of the **Java** language, for PC and embedded device (**Android** and **JavaME**), acquired in the workplace and training. Released iSapiens software platform written in Java.
- Good proficiency in the use of **SQL** and the **MySQL DBMS**, skills in database design through the E-R model and the relational model, gained in training and working contexts, eg. through the design and development of a database for the demonstrator *Smart Street Cosenza*. The bachelor's degree thesis contains an analysis of the MySQL query optimization engine and proposes solutions for query optimization, based on Hypertree Decomposition.
- Good proficiency in **software design**, through the use of design patterns and modeling languages such as **UML**, gained in the workplace and training.
- Good proficiency in the use of **CUDA** for **GPGPU computing** and SIMD parallel computing, gained in working and training contexts. Master thesis is about this topic.
- Good proficiency in **Data Mining, Analysis, and Knowledge Discovery**, gained in the workplace and training. The master's degree thesis introduces a novel clustering algorithm for Data Stream, developed on GPU architectures.
- Knowledge of the **C** and **C ++** programming languages gained in the workplace and training, for instance, by modifying the open source simulator SWMM, for research needs.
- Proficiency in the use of tools and platforms for the development of **web applications** based on **J2EE** and web services, gained in the workplace and training.
- Knowledge of **assembly language**, knowledge of **VHDL**, gained in the workplace and training.
- Basic knowledge of the **QT toolkit**, developed in his spare time.
  
- Ability to learn quickly how to use new software, operating systems, programming languages, acquired in response to business needs.
  
- Software and development environments known:
  - development environments: **NetBeans, Eclipse, IntelliJ, Visual Studio**.
  - UML modeling software: **VisualParadigm, Sparx Enterprise Architect, Borland Together**.
  - Analysis software: **MatLab**.
  - Software for data mining: **Weka**.
  - Office software: **MS Office, LibreOffice**.

## DIGITAL COMPETENCE

SELF-ASSESSMENT				
INFORMATION PROCESSING	COMMUNICATION	CONTENT CREATION	SAFETY	PROBLEM SOLVING
PROFICIENT USER	PROFICIENT USER	PROFICIENT USER	PROFICIENT USER	PROFICIENT USER

Digital competences - Self-assessment grid

- Good command of office applications such as Microsoft Office, OpenOffice, LibreOffice, Latex.

## DRIVING LICENCE

B

## ADDITIONAL INFORMATION

## MEMBERSHIPS

**Able of Enrolment to the Italian IT Engineers Association**

Obtained on May 2013.

Released by Ordine degli Ingegneri Cosenza

## CERTIFICATIONS

**First Certificate In English – FCE.**

Description: English certificate, level B2 upper.

Obtained on: September, 11 2013.

Released by: University of Cambridge - ESOL Examination.

**English Language Knowledge Certification, B2 upper.**

Obtained on: July, 31 2013.

Released by: Centro Linguistico di Ateneo – Università della Calabria.

SOFTWARE RELEASES  
AND PROTOTYPES**isapiens@home**

**Description:** iSapiens is a distributed, agent-based framework for the development of Cyber-Physical Systems and Smart Environments, which exploits the Internet of Things and Edge Computing concepts. It has been written in Java. Isapiens has been developed internally to the “Domus Sicurezza” research project.

**Release date:** January 2016.

**Designed and developed by:** F. Cicirelli, A. Giordano, G. Spezzano, A. Vinci.

**Website:** <http://domus.icar.cnr.it/isapiens/isapiensATheme.html>

**Related publications:** [c8][c9]

**Smart Street Cosenza**

**Description:** It is a prototype of Smart Street created in the town of Cosenza, Italy. It is an ICT infrastructure which includes sensor nodes, networking nodes and computational nodes each disseminated on the main street of the city center. The infrastructure currently host a distributed environmental monitoring application, but it is designed to be further extended by hosting other Smart City applications, which are in development. The Smart Street Cosenza has been realized as demonstrator of the “ResNovae” research project.

**Running since:** November 2015

**Designed, developed and deployed by:** A.F. Gentile, D. Macri, L.Porto, G. Spezzano, A. Vinci.

**Website:** <http://resnovaesrv2.icar.cnr.it/rainbowServer/>

**Related publications:** [c6]

PARTICIPATION IN  
RESEARCH PROJECTS**DOMUS technological district**

**Topic:** A smart platform for monitoring and management of in-home security of people and things.

**Funded by :** Ministero dell'istruzione, dell'università e della ricerca – **Total found:** € 4,320,000 - **amount funding for operational unit:** € 840,000

**Performed activities:** Design and development of the distributed, agent-based iSapiens platform for the development of Cyber-Physical Systems and Smart Environments. Design and development of algorithms and solutions for ambient intelligence and ambient assisted living. Design and development of solutions for structural monitoring of building.

**Activity period:** since October, 2015

**RES NOVAE**

**Topic:** Smart city, Smart Energy Management, Smart Infrastructures

**Funded by :** Ministero dell'istruzione, dell'università e della ricerca – **Total found:** € 51,490,000€ - **amount funding for operational unit:** € 1,300,000

**Performed activities:** Design and development of a Cloud Assisted, Agent Based Framework for Cyber Physical Systems. Design, development and deployment of the Smart Street Cosenza system. Design and validation of a real-time urban drainage network soft-control system.

**Activity period:** from January, 2014 - to March, 2016

## ORGANIZING ACTIVITIES

**International Program Committee Member**

- The 14th IEEE International Conference on Networking, Sensing and Control (ICNSC 2017). **Place and date:** Calabria, Italy, May 16-18, 2017. **Website:** <http://icnsc2017.dimes.unical.it>
- The 31st European Conference on Modelling and Simulation (ECMS 2017). **Place and date:** Budapest, Hungary, May 23-26, 2017. **Website:** <http://www.scs-europe.net/conf/ecms2017/>
- The 6th International Conference on Smart Cities, Systems, Devices and Technologies (SMART 2017) **Place and date:** Venice, Italy, June 25-29, 2017. **Website:** <http://www.iaria.org/conferences2017/SMART17.html>
- The 9th International Conference on Internet and Distributed Computing Systems (IDCS 2016) **Place and date:** Wuhan, China, September 28-30, 2016. **Website:** <http://sle.whut.edu.cn/IDCS2016>
- The 19th IEEE International Conference on Computer Supported Cooperative Work in Design. **Place and date:** Falerna, Catanzaro, Italia, 6-8 Maggio 2015. **Website:** <http://2015.cscwd.org>

**Local Arrangements Chair at**

The 14th IEEE International Conference on Networking, Sensing and Control (ICNSC 2017).  
**Place and date:** Calabria, Italy, May 16-18, 2017. **Website:** <http://icnsc2017.dimes.unical.it>

**Session Chair at**

The 19th IEEE International Conference on Computer Supported Cooperative Work in Design.  
**Place and date:** Falerna, Catanzaro, Italy, May 6-8 2015. **Website:** <http://2015.cscwd.org>

**Local Chair at**

The 9th Italian Workshop on Artificial Life and Evolutionary Computation (WIVACE 2014). **Place and date:** Vietri sul Mare, Salerno, Italy, May 14-15 2014. **Website:** <http://wivace2014.icar.cnr.it/>

**OTHER EDUCATIONAL AND ACADEMIC ACTIVITIES****Assistant professor**

**Teaching:** "Sistemi informativi"  
**Topics:** Workflows, Petri Networks, Process Mining,  
**Degree course:** Master of Science in Statistics and data for business and finance  
**At:** University of Calabria, Italy.  
**Date:** since September 2016

**Lecturer**

**Title:** "Exploiting Internet of Things and Edge Computing for the creation of Smart Environments".  
**Topic:** Internet of Things.  
**Seminars:** T IEEE SMC Italian Chapter Seminar Series  
**Website:** <https://events.vtools.ieee.org/m/43944>  
**Place and date:** Rende (CS), Italy, November 22, 2017.

**Speaker at conference**

**Title:** "SmartAgents and Fog Computing for Smart City Applications".  
**Conference:** First International Conference on Smart City (Smart-CT 2016).  
**Place and date:** Malaga, Spain, June, 15 - 17 2016

**Lecturer**

**Title:** "Internet delle cose".  
**Topic:** Internet of Things.  
**Seminars:** Training Project GREAT - Global Research Education And Training For Advanced Smart Cities  
**Website:** [http://resnovae-unical.it/wp-content/uploads/2014/11/Seminario-28\\_11\\_2014.jpg](http://resnovae-unical.it/wp-content/uploads/2014/11/Seminario-28_11_2014.jpg).  
**Place and date:** Cosenza, Italy, November, 28 2014.

**Speaker at conference**

**Title:** "Rainbow: an Intelligent Platform for Large-Scale Networked Cyber-Physical Systems".  
**Conference:** 5th International Workshop on Networks of Cooperating Objects for Smart Cities 2014 (UBICITEC 2014).  
**Place and date:** Berlin, Germany, April, 14 2014.

**Reviewer for Journals**

- IEEE Transaction on Human-Machine Systems, ISSN 2168-2291;
- Journal of Network and Computer Applications, ISSN 1084-8045;
- The Scientific World Journal, ISSN 2356-6140;
- IEEE Transaction of Cloud Computing, ISSN 2168-7161.

**OTHER EDUCATION****Training Course of I-AMICA project**

- Training for High Technology, Integrated Infrastructure for Climate and Environmental Monitoring
- **Date:** January 2013 - June 2013.
- **Topics:**
  - Monitoring techniques for the atmosphere and the climate (35 hours).
  - Computer systems, parallel computing and grid computing (20 hours).
  - Passive remote sensing techniques (24 hours).
  - Active remote sensing techniques (24 hours).
  - Propagation, electromagnetic scattering and applications (24 hours).
  - Integrated optical sensors and optical fiber (24 hours).
- Classes taught by researchers of National Research Council of Italy.

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### Ph.D. Training School on Energy Efficiency in Large Scale Distributed Systems (3rd COST 804)

- **Date:** April, 8-12 2013
- **Topics:** Lectures on Cloud Computing, Data centers and green economy.
  - From energy efficient networking to sustainable networking (Prof. Michela Meo, Politecnico di Torino)
  - HPC and energy savings (Prof. Jean-Marc Pierson, Université Paul Sabatier, Toulouse)
  - Energy Efficiency and Performance Trade-off in Communication Networks (Dr. Tuan Anh Trinh, Budapest University of Technology and Economics)
  - Energy-efficiency in Cloud data centers: the case of eco4cloud (Dr. Carlo Mastroianni, ICAR-CNR & Eco4cloud Srl)
  - Energy-aware mobile computing (Dr. Carmela Comito, Università della Calabria, Rende)
  - Green Performance Indicators for energy-efficient services (Prof. Barbara Pernici, Politecnico di Milano)
  - The new data center, metrics and energy paradigm (Dr. Jean-Michel Rodriguez, IBM France)

### Seminar attendances

- Introduction to Deep Learning, Applications and Tools. January 26, 2017. Prof. Maryam Amir Haeri, AmirKabir University of Technology (Tehran Polytechnic).
- GPU computing: Achievements and perspectives for HPC. June, 10 2015. Prof. Manuel Ujaldón, University of Malaga.
- Dall'automa a stati finiti al calcolo consensuale. March, 18 2014. Prof. Stefano Crespi Reghizzi, Politecnico di Milano. (in Italian)
- Applicazioni tecnologiche della teoria dei linguaggi: la parsificazione in parallelo nei browsers e servers. March, 18 2014. Prof. Stefano Crespi Reghizzi, Politecnico di Milano. (in Italian)
- Tools for querying data under expressive constraints. December, 5 2013. Prof. Andrea Cali, Dept. of Computer Science and Information Systems, Birkbeck University of London.
- Physical Cyber Social Computing: An early 21st century approach to Computing for Human Experience. June, 27 2013. Prof. Amit Seth, Ohio Center of Excellence in Knowledge-enabled Computing.
- Automi Cellulari per una visione del mondo parallela ... quando è possibile. June, 5 2013. Prof. Salvatore Di Gregorio, Università della Calabria. (in Italian)
- IoT: Internet of Things, challenges and novel solutions. April, 15 2013. D.ssa Nathalie Mitton, INRIA (Lille, Francia).
- Differenza/Affinità calcolo vettoriale e GPU. April, 10 2013. Dott.ssa Claudia Calidonna, CNR-ISAC. (in Italian)
- OPEN MP (Open Multiprocessing), Interfaccia di Programmazione per Applicazioni Parallele. February, 28 2013. Dott. Fedele Stabile, Università della Calabria. (in Italian)

PUBLICATIONS  
NOTE

## JOURNAL ARTICLES

All the publications listed below have been drafted with the joint contribution of the authors.

- [j3] *A distributed real-time approach for mitigating CSO and flooding in urban drainage systems.*  
G. Garofalo, A. Giordano, P. Piro, G. Spezzano, A. Vinci.  
Journal of Network and Computer Applications (JNCA), Elsevier, Volume 78, pages 30-42, ISSN: 1084-8045. DOI: 10.1016/j.jnca.2016.11.004. (2017)
- [j2] *Metamodeling of Smart Environments: from Design to Implementation.*  
F. Cicirelli, G. Fortino, A. Guerrieri, G. Spezzano, A. Vinci.  
Advanced Engineering Informatics (ADVEI), Elsevier. ISSN: 1474-0346. DOI: 10.1016/j.aei.2016.11.005. (2017)
- [j1] *On the Design of Smart Homes: A Framework for Activity Recognition in Home Environment.*  
F. Cicirelli, G. Fortino, A. Giordano, A. Guerrieri, G. Spezzano, A. Vinci.  
Journal of Medical Systems (JOMS), Special Issue on Advances in Ambient Intelligence for Health (AmIHEALTH 2015). ISSN: 0148-5598. DOI: 10.1007/s10916-016-0549-7. (2016). Impact Factor: 2,213; SJR: 0,791.

## BOOK CHAPTERS

- [p1] *A Smart Platform for Large-Scale Networked Cyber-Physical Systems.*

A. Giordano, G. Spezzano, A. Vinci.  
In Management of Cyber Physical Objects in the Future Internet of Things: Methods, Architectures and Applications, ISBN 978-3-319-26867-5, (2016).

## CONFERENCE PAPERS

- [c9] *iSapiens: A Platform for Social and Pervasive Smart Environments.*  
O. Briante, F. Cicirelli, A. Guerrieri, G. Ruggeri, G. Spezzano, A. Vinci.  
In proc. of the IEEE World Forum on Internet of Things, Special Session on Social Internet of Things, 12-14 December 2016, Reston, VA, USA, ISBN 978-1-5090-4130-5 (2016).
- [c8] *Edge enabled development of Smart Cyber-Physical Environments.*  
F. Cicirelli, G. Fortino, A. Guerrieri, G. Spezzano, A. Vinci.  
In proc. of the 2016 IEEE International Conference on Systems, Man, and Cybernetics (SMC2016), October 9-12, 2016, Budapest, Hungary, ISBN 978-1-5090-1897-0 (2016).
- [c7] *A Meta-Model Framework for the Design and Analysis of Smart Cyber-Physical Environments.*  
F. Cicirelli, G. Fortino, A. Guerrieri, G. Spezzano, A. Vinci.  
In the Proc. of the IEEE 20th International Conference on Computer Supported Cooperative Work in Design (CSCWD 2016), May 4-6, 2016, Nanchang, China, ISBN: 978-1-5090-1914-4 (2016).
- [c6] *Smart Agents and Fog Computing for Smart City Applications.*  
G. Spezzano, A. Giordano, A. Vinci.  
In proceeding of First International Conference on Smart City (Smart-CT 2016), Málaga, Spain, June 15-17, 2016, ISBN 978-3-319-39594-4, (2016).
- [c5] *A Data Analytics Schema for Activity Recognition in Smart Home Environments.*  
G. Fortino, A. Giordano, A. Guerrieri, G. Spezzano, A. Vinci.  
In Proceedings of 9th International Conference on Ubiquitous Computing & Ambient Intelligence (UCAMI 2015), ISBN 978-3-319-26400-4, (2015).
- [c4] *Twitter to integrate human and Smart Objects by a Web of Things architecture.*  
A. Giordano, G. Spezzano, H. Sunarsa, A. Vinci.  
Proceedings of 19th IEEE International Conference on Computer Supported Cooperative Work in Design, CSCWD 2015, Calabria, Italy, May 6-8, 2015, ISBN 978-1-4799-2001-3, (2015).
- [c3] *Pattern Detection in Cyber-Physical Systems.*  
G. Spezzano, A. Vinci.  
In proc. of 1st Workshop on Big Data and Data Mining Challenges on IoT and Pervasive Systems (BigD2M). Procedia Computer Science, Volume 52, 2015, Pages 1016-1021, ISSN 1877-0509, (2015).
- [c2] *A Cyber-Physical System for Distributed Real-Time Control of Urban Drainage Networks.*  
A. Giordano, G. Spezzano, A. Vinci, G. Garofalo, P. Piro.  
In Smart Cities. Proceedings of Internet and Distributed Computing Systems - 7th International Conference (IDCS 2014), pp 87-98. Springer LNCS ISBN 978-3-319-11691-4, (2014).

## INFORMAL PUBLICATIONS

[c1] *Rainbow: an Intelligent Platform for Large-Scale Networked Cyber-Physical Systems*.  
A. Giordano, G. Spezzano, A. Vinci.  
Proceedings of the 5th International Workshop on Networks of Cooperating Objects for Smart Cities (UBICITEC 2014). CEUR-WS.org, Volume 1156, pp 70-85. ISSN 1613-0073, (2014).

ITALIAN  
CONFERENCE PAPERS

[i1] *Designing Cyber-Physical Systems for Smart Infrastructures: The Rainbow Platform*.  
A. Giordano, G. Spezzano, A. Vinci.  
ERCIM News 2014(97), ISSN 0926-4981, (2014).

[n1] *Applicazione di un sistema distribuito di controllo in tempo reale di una rete di drenaggio urbano*.  
G. Garofalo, A. Giordano, A. Vinci.  
Atti del XXXIV Convegno di Idraulica e Costruzioni Idrauliche, (IDRA 2014). ISBN 9-78-8-890-45618-3, (2014).  
**Topic:** A distributed control algorithm for urban drainage network management.

ITALIAN  
TECHNICAL REPORTS

[r6] *Definizione e sperimentazione di un sistema per la gestione dei deflussi nella rete idrica tramite smart objects*.  
G. Garofalo, A. Giordano, G. Spezzano, A. Vinci.  
Technical Report ICAR-CNR, RT-ICAR-CS-15-04, (2015).  
**Topic:** Definition and testing of a system for the management drainage network runoff through smart objects.

[r5] *Realizzazione di un algoritmo bio-ispirato per il clustering di stream di dati evolventi su architettura GPU*.  
G. Spezzano, A. Vinci.  
Technical Report ICAR-CNR, RT-ICAR-CS-15-03, (2015).  
**Topic:** Design and development of a bio-inspired algorithm for clustering of evolving data streams on GPU architecture.

[r4] *Definizione di algoritmi per la gestione di eventi provenienti da Smart Object in ambito Cloud*.  
A. Giordano, G. Spezzano, A. Vinci.  
Technical Report ICAR-CNR, RT-ICAR-CS-14-03, (2014).  
**Topic:** Definition of algorithms for the management of events from the Smart Object in the Cloud.

[r3] *Analisi e progettazione di algoritmi di data mining streaming per l'analisi online dei dati*.  
A. Giordano, G. Spezzano, A. Vinci.  
Technical Report ICAR-CNR, RT-ICAR-CS-14-02, (2014).  
**Topic:** Analysis and design of data stream mining algorithms for online data analysis.

[r2] *Smart Object e forme di cooperazione*.  
A. Giordano, G. Spezzano, A. Vinci.  
Technical Report ICAR-CNR, RT-ICAR-CS-14-01, (2014).  
**Topic:** Smart Objects and cooperation.

[r1] *Definizione dell'architettura software di un Sistema Cyber-Physical*.  
L. Belcastro, A. Giordano, G. Spezzano, A. Vinci.  
Technical Report ICAR-CNR, RT-ICAR-CS-13-05, (2013).  
**Topic:** Software architecture definition for Cyber-Physical Systems.