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|  | Modena, 21 – 01 – 2014 |
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**Oggetto:** Research Topic per il Dottorato di Ricerca ICT di Marcello Missiroli

1. *SCUOLA DI DOTTORATO IN ICT*

*Research project for a PhD curriculum in ICT – Computer Engineering and Science*

*Tutor*: Prof. Michele Colajanni

*Argomento*: Privacy e Sicurezza per servizi e dispositivi del futuro.

*Title of research: Privacy and Security for future interconnected devices and services.*

*Keywords: (3)*

\_Internet of things

\_Privacy

\_Security

\_Services

*Research objectives:*

The overall reserch project focuses on the Internet of things. It is estimated that billions of smart devices will be continuosly connected to the the Internet by 2020, offering great opportunities but at the same time raising security and privacy concerns. The research will focus on proposals of novel solutions for security and privacy between heterogeneous devices with limited computation capabilities, keeping an eye on usability and performance issues.

*Specific research activity and scheduled courses:*

Competences in

* Internet-based services
* Security and Cryptography
* Performance evaluation
* Games theory
* Open source software

This research project encompasses design, modeling, simulation and experimental activities. Different approcahes will be considered, but the main focus will be on the Internet of things, Beside research activities, the PhD students will attend classes on security, data modeling, project managment and distributed system. Periods of activities in foreign labs are also possibile.

*Supporting research projects (and Departments)*

* EU Projects
* Centro di Ricerca Interdepartimentale sulla Sicurezza e Prevenzione dei Rischi (CRIS), Università di Modena e Reggio Emila
* Dipartimento di Ingegneria "Enzo Ferrari", Università di Modena e Reggio Emilia.

*Possibile connection with research groups, companies, universities*

* Iot Labs, Politecnico di Milano
* Università di Pisa
* AT&T labs

Marcello Missiroli Michele Colajanni