Corentin DUPONT

35 years old
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Computer Science Researcher
PhD Student

EDUCATION

PhD in Computer Science	On-going (snd year)	University of Trento, Italy. Thesis on Energy Aware Software in Cloud Computing.
Engineer Diploma (Master's degree)	2003	Institut Supérieur d'Electronique et du Numérique (ISEN - Toulon, formerly ISEM), France, Real Time Computing option
Languages	French	Native language
	English	**Fluent** (647/700 at the TOEFL, 980/990 at the TOEIC**)**
	Italian	Fluent (Living in Italy since 2010)

TECHNICAL SKILLS AND COMPETENCES

Operating Systems	**Linux**, Windows, Solaris, HP-UX
Languages	**Haskell**, **C++**, Java, Ada, Scala
Programming techniques	**DSLs, Constraint Programming**
Development and Specification	**GHC**, Vim, Eclipse, Linux tools, Qt, Doors
Project Management	CMMi 3 level, MS Project & OWB

PUBLISHED PAPERS

- C. Dupont, G. Giuliani, F. Hermenier, T. Schulze, A. Somov: "An Energy Aware Framework for Virtual Machine Placement in Cloud Federated Data Centres", in *Proceedings of E-Energy 2012 Third International Conference on Future Energy Systems*, 9-11 Mai 2012, Madrid.
- A. Somov, C. Dupont, and R. Giaffreda: "Smart-City Mobility with Cognitive Internet of Things", Future Network and Mobile Summit (FUNEMS), 1–10, 2013
- M.-Q. Dang, A. Somov, C. Dupont: "Energy Usage and Carbon Emission Optimization Mechanism for Federated Data Centres", in *Proceedings of E2DC 2012 1st International Workshop on Energy-Efficient Data Centres*, 8 Mai 2012, Madrid.
- M.-Q. Dang, R. Basmadjian, H. De Meer, R. Lent, T. Mahmoodi, D. Sannelli, F. Mezza, C. Dupont: "Energy efficient resource allocation strategy for cloud data centres", in *Proceedings of 26th Int. Symposium on Computer and Information Sciences*, 26-28 Sept. 2011, London.

More papers can be found on my website www.corentindupont.info.

RESEARCH EXPERIENCES

Researcher at Create-Net research centre since October 2010 (Trento, Italy). Consultant for "Société pour l'Informatique Industrielle" from 2003 to 2010 (Aix en Provence & Paris, France).
I created a full game in **Haskell**, including a **DSL and on-the-fly compilation**: www.nomyx.net
This is the first complete implementation of a Nomic game on a computer.

2010 - Present	*CREATE-NET*	*FP7 EU PROJECT FIT4GREEN AND DC4CITIES*
		Leader of Work Package 4 (FIT4Green) and 5 (DC4Cities). Research and design the algorithms and policies for energy-aware optimization of data centre operations. - WP management, - Algorithmic research, specification and design, - Implementation of FIT4Green prototype using **Constraint Programming,** - Paper writing and project proposal writing. *Constraint Programming, Java, Green SLAs.*
2011 - Present	*CREATE-NET*	*FP7 EU PROJECT ICORE*
		Research in the area of Internet of Things. Leader of the iCore platform. - Research on **DSLs to address the diversity of real-world objects**, - Implementation of the iCore platform prototype, - Coordination of the implementation of the platform. *DSLs, Internet of Things.*

ENGINEERING EXPERIENCES

2003 - 2008	*DCNS / EADS*	*TECHNICAL LEADER & PROJECT LEADER (SIMULATION FIELD)*
		Projects for the Norway frigates SKJOLD and the Franco-Italian frigates HORIZON: - **Technical leader and project leader (CMMi 3)**, with a team of 4 persons for the realization of the Real Time Simulator (DCNS) - Specification, Conception and development of 5 simulators (calculator in Ada and GUI in C++/Qt) : Fire Control Tracker, Decoy Launcher System, Torpedo Launch System, Air Transceiver, Principal Anti-Air Missile System. - Evolution of NeVis, a 3D demonstrator for urban warfare (EADS). *C++, Ada, Qt, Linux, CMMi tools, OWB, Doors, Vega Prime, Delta 3D*
2009 - 2010	*PSA*	*AUTOMATIC GEARBOX SOFTWARE DEVELOPMENT*
		Supplier's management for the automatic gearbox AL4/AT8 for PSA Peugeot Citroën - Specification writing. - Management of the supplier (evolutions, technical issues, project management). *MS-Project, project management tools, SQL.*

HOBBIES

- Paragliding instructor (tandem).
- Theatre since 9 years (several performances in Italian).