

Damien DOSIMONT

Experience

- 2012–Present **Beginning Researcher**, *Inria*, Montbonnot Saint-Martin (Lyon Area), France.
Trace analysis based on aggregation, visualization and interaction techniques:
- Bibliography study on trace, information and scientific visualization domains
 - Design of an innovative trace analysis tool
 - Writing of scientific articles and technical reports
 - Communications in various conferences and workshops
 - Interaction with industrial partners and occasional consulting (STMicroelectronics)
 - Teachings in Polytech'Grenoble engineering school
- 2011 (6 months) **Engineering Intern**, *Thales Communications and Security, S.A.*, Paris Area, France.
Performance studies and benchmarks realization for different types of software and hardware real-time and embedded architectures.
- 2010 (2 Months) **Research Engineer**, *LIP6, Université Pierre et Marie Curie Paris VI*, Paris, France.
Design space exploration of telecommunication application on MPSoC (following a 6 month scholar project).

Education

- 2012–present **PhD, Computer Science** (ongoing), *Université Joseph Fourier*, Grenoble I.
Thesis title: Spatiotemporal Aggregation for Execution Trace Visualization
Advisers: Dr. Guillaume Huard & Dr. Jean-Marc Vincent
- 2009–2011 **MSc, Computer Science**, *Université Pierre et Marie Curie*, Paris VI, *with honors*.
specialism in Architecture and Conception of Integrated Systems
- 2005–2009 **BSc, Electronics**, *Université Pierre et Marie Curie*, Paris VI, *with honors*.

Research Interests

Trace Visualization

- SoC-Trace Project I work in the SoC-Trace project, which gathers academics like INRIA, LIG laboratory, and industrial partners like STMicroelectronics, Probayes or Magillem. My research focuses on the visualization of traces provided by the execution of embedded multimedia applications, in order to analyze their behavior. I propose solutions based on data aggregation to provide scalability and help the analysis of traces that contain much information.
- SONGS Project I am also involved in the SONGS project, funded by the French Research National Agency, and focused on the simulation of large parallel systems. This project gives me the opportunity to extend the analysis techniques I design to parallel applications.

Main Publications

- [1] D. Dosimont, R. Lamarche-Perrin, L.M. Schnorr, G. Huard, J-M. Vincent, A Spatiotemporal Data Aggregation Technique for Performance Analysis of Large-scale Execution Traces, in *Proceedings of the 2014 IEEE International Conference on Cluster Computing (CLUSTER'14)*, Madrid, September 2014
- [2] D. Dosimont, G. Pagano, G. Huard, V. Marangozova-Partin, J-M. Vincent, Efficient Analysis Methodology for Huge Application Traces, in *Proceedings of the 2014 International Conference on High Performance Computing & Simulation (HPCS)*, Bologna, July 2014

Teaching Experience

Polytech'Grenoble Engineering School (128 hours)

- 2013–2014 **C** practicals, 3I 3rd year
- 2012–2014 **Unix Project** practicals, 3I 4th year
- APO** (Algorithmic and Object Programming) practicals, TIS 3rd year
- AL** (Software Architecture) practicals, TIS 3rd year
- 2012–2013 **C++** practicals, E2I 4th year
- Internship tutoring

Language Skills

- French **Mother Tongue**
- English **Advanced**
- Portuguese **Basic**
(Brazil)
- German **To reactivate**

Programming Skills

- Languages **Proficient: C, C++, Java**
Familiar: Python, Shell Unix (Bash), ASM, SystemC, VHDL, HTML, \LaTeX
- OS Linux, Windows

Interests

- Technologies Video games, programming
- Music Computer music, guitar, bass guitar, saxophon
- Sports Mountain bike, running
- Literature Science fiction, classical, detective novels

References

- Guillaume Huard Associate Professor, Université Joseph Fourier, Grenoble I
Ismier, ✉ guillaume.huard@imag.fr
- Jean-Marc Associate Professor, Université Joseph Fourier, Grenoble I
Vincent Ismier, ✉ jean-marc.vincent@imag.fr
- Daniela Genius Associate Professor, Université Pierre et Marie Curie, Paris VI
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- Emmanuelle Associate Professor, Université Pierre et Marie Curie, Paris VI
Encrenaz ✉ emmanuelle.encrenaz@lip6.fr
- Julien Maréchal Software Engineer, Thales Communications and Security, S.A.
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