

Clément PONCELET SANCHEZ

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Email: cponcelet@cs.uni-salzburg.at

28 years old. French driving licenses: A, B.

Sc. Researcher

Research Interests

Formal Methods, Synchronous Languages, Model-Based Testing, Timed and Complex Scenarios, Interactive Music Systems.
Compilation, Virtual Machine, Symbolic Execution, Verification, Abstract Domain.

Education

- 2013-16:** **PhD:** *Model-Based Testing Real-Time and Interactive Music Systems.*
Topic: Formal Verification and Test. **In** the INRIA Team MUTANT, **at** the Institute of Research in Coordination Acoustics/Music (IRCAM). **Supervisor:** **Florent Jacquemard.**
- 2012-13:** Master degree in computer science **at** Paris 6: University of Pierre and Marie Curie (UPMC)
Mentions: STL (software science and technology)
APR (Algorithm programming and Research)
- 2011:** DUT on computer science **at** the IUT of Paris Descartes
- 2008:** Baccalaureate S SI mentions Mathematics, Engineering Sciences
Lycée Gaston Bachelard (77)

Work Experiences

- 2017-** **Postdoc:** Scientific Assistant at the University of Salzburg in the Computational System team
- 2016:** **Postdoc:** Professor Assistant: **ATER** at Paris 6: University Pierre and Marie Curie (UPMC)
Internship: 6 weeks in the FMT team, Twente University (Netherland).

Teaching experiences

- Salzburg **2017-18:** [L-] Compiler Construction Class
[L-] Systems Engineering
[L-] Introduction to Operating Systems
- UPMC **2017:** [M1] Advanced Compilation (compiler, abstract machine, virtual machines, advanced traits)
[L3] Programming Models and languages Interoperability (Ocaml)
[L3-pro] Java
[L3] IHM: Programming of Human-System Interfaces
- 2016:** [L3] SACS: Structure and Architecture Client-Server
[L1] Coding Introduction (Python)
- 2015-16:** [L3] SACS: Structure and Architecture Client-Server
- 2014-15:** [L3] Environment of programming (Scripts and Perl)
[L3] IHM: Programming of Human-System Interfaces
- 2013-14:** [L3] Environment of programming (Scripts and Perl)
[L1] ARE Modeling (Python), creation of models for physics problems

Languages

Spanish: bilingual

English: read, written, spoken

German: read, written, spoken (A2)

Hobbies

Drummer (during 23 years)

Percussionist (Academy and Harmony)

Tennis

CONFERENCE SUB-REVIEWER

- International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI), 2018;
- The 8th International Symposium on Symbolic Computation in Software Science (SCSS), 2017;

A) PEER-REVIEWED PUBLICATIONS

CONFERENCE AND WORKSHOP PAPERS

- [1] A.S. Abyaneh et al. "Selfie: Towards Minimal Symbolic Execution". In: Online Proc. Workshop on Modern Language Runtimes, Ecosystems, and VMs (MoreVMs). 2018.
- [2] C. Poncelet and F. Jacquemard. "Model Based Testing of an Interactive Music System". In the proceedings of the 30th ACM/SIGAPP Symposium On Applied Computing (ACM SAC), April 2015.

JOURNAL PAPERS

- [1] C. Poncelet and F. Jacquemard. "Model-Based Testing for Building Reliable Realtime Interactive Music Systems". Science of Computer Programming, ACM SAC special edition. 2016.
- [2] C. Poncelet and F. Jacquemard. "An automatic Test Framework for Interactive Music Systems". Journal of New Music Research (JNMR). April 2016. Routledge. DOI: 10.1080/09298215.2016.1173707.
- [3] G. Burloiu, A. Cont and C. Poncelet "A visual framework for dynamic mixed music notation". Journal of New Music Research (JNMR). July 2016.

NATIONAL CONFERENCE AND WORKSHOP PAPERS

- [1] P. Talbot and C. Poncelet. "Langage pour la vérification de modèles par contraintes". In the proceedings of the 13th Constraint Programming's French Days (JFPC), June 2017.

POSTERS

- [1] C. Poncelet and C. Kirsch. "Symbolic Execution in Selfie: -a first step". Klee Workshop, April 2018.
- [2] C. Poncelet and F. Jacquemard. "Test methods for Score-Based Interactive Music Systems Toward a formal Specification". ICMC/SMC, Sep. 2014.

B) NON-PEER-REVIEWED PUBLICATIONS

TECHNICAL REPORTS

- [1] C.Poncelet and F. Jacquemard. Offline methods of conformance testing for Antescofo. Tech. rep. RR-8700. IRCAM - INRIA, Mar. 2015.
- [2] C.Poncelet and F. Jacquemard. Compilation of the Intermediate Representation V1. Tech. rep. RR-8701. IRCAM - INRIA, Mar. 2015.

CONFERENCES AND SEMINARS

1. Complete Symbolic Analysis in Selfie, Virtual Machine Meetup (VMM), Linz, Austria, September 2018.
2. Model-Based Testing of an Interactive Music System, SYNCHRON, Bamberg, 2016.

3. Interactive Music Systems and Model-Based Testing, Seminar, University of Twente, 2016.
4. Model-Based Testing of an Interactive Music System, INRIA's Junior Seminar, INRIA, Paris, 2015.
5. An Interpretable Model for Interactive Music Systems, Journées Nationales GÉOCAL-LAC-LTP, LORIA, Nancy, 2015.
6. Model-Based Conformance Testing Interactive Music Systems, Séminaire Recherche et Technologie, IRCAM, Paris, 2015.
7. Model-Based Conformance Testing Interactive Music Systems, Séminaire Chronos, College de France, Paris, 2015.
8. Model-Based Testing of an Interactive Music System, 30th ACM/SIGAPP Symposium On Applied Computing (ACM SAC), Salamanca, 2015.

MOST IMPORTANT PUBLICATIONS

JOURNAL PAPERS

- [1] C. Poncelet and F. Jacquemard. "Model-Based Testing for Building Reliable Realtime Interactive Music Systems". Science of Computer Programming, ACM SAC special edition. 2016.
- [2] C. Poncelet and F. Jacquemard. "An automatic Test Framework for Interactive Music Systems". Journal of New Music Research (JNMR). April 2016. Routledge. DOI: 10.1080/09298215.2016.1173707.
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CONFERENCE PAPERS

- [4] A.S. Abyaneh et al. Selfie: Towards Minimal Symbolic Execution. In: Online Proc. Workshop on Modern Language Runtimes, Ecosystems, and VMs (MoreVMs). 2018.
- [5] C. Poncelet and F. Jacquemard. "Model Based Testing of an Interactive Music System". In the proceedings of the 30th ACM/SIGAPP Symposium On Applied Computing (ACM SAC), April 2015.