Jérémy Thibault

PhD Student in Computer Science

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Education

2018- **PhD Student in Computer Science**, *Max Planck Institute for Security and Privacy*, Bochum, Germany
Supervisor: Cătălin Hriţcu
Subject: Secure Compilation
Started at Inria Paris, France, then moved with advisor to Germany

2016-2018 **Master's Degree in Computer Science**, *Université Rennes 1*
Research in Computer Science Specialization

2015-2018 **Magistère d'Informatique**, *École Normale Supérieure de Rennes*
Three-year program focused on scientific research

2015–2016 **Bachelor's degree in Computer Science**, *University Rennes 1*
L3 Research and Innovation, Computer Science

2012–2015 **"Classe préparatoire aux grandes écoles"**, *Lycée Camille Guérin*, Poitiers
Two year program in mathematics, physics and computer science preparing for a national competitive exam.
Equivalent to the first two years of a bachelor's degree

Work Experience

February—July 2018 **Research internship**, *Prosecco Team, Inria Paris*, Paris, France
Intership under the supervision of Cătălin Hriţcu.
Subject: "A Trace-based Proof Technique for Secure Compilation"

June—August 2017 **Research internship**, *Logic and semantics group, Aarhus University*, Denmark
Internship under the supervision of Aslan Askarov.
Subject: information-flow security

May—July 2016 **Research internship**, *Team SUMO, Inria Rennes*, Rennes, France
Two-months internship under the supervision of Ocan Sankur in team SUMO (Inria Rennes)
Title: Games with hierarchical objectives

Publications at Conferences

2024 Jérémy Thibault, Roberto Blanco, Dongjae Lee, Sven Argo, Arthur Azevedo de Amorim, Aïna Linn Georges, Catalin Hritcu, and Andrew Tolmach (2024). "SECOMP: Formally Secure Compilation of Compartmentalized C Programs". In: Accepted at CCS'24 (October 2024). arXiv: 2401.16277 [cs.PL].

2022 Akram El-Korashy, Roberto Blanco, Jérémy Thibault, Adrien Durier, Deepak Garg, and Catalin Hritcu (2022). "SecurePtrs: Proving Secure Compilation with Data-Flow Back-Translation and Turn-Taking Simulation". In: *35th IEEE Computer Security Foundations Symposium, CSF 2022, Haifa, Israel, August 7-10, 2022*. IEEE, pp. 64–79. DOI: 10.1109/CSF54842.2022.9919680. URL: https://doi.org/10.1109/CSF54842.2022.9919680.

2020 Carmine Abate, Roberto Blanco, Ştefan Ciobâcă, Adrien Durier, Deepak Garg, Catalin Hritcu, Marco Patrignani, Éric Tanter, and Jérémy Thibault (2020). "Trace-Relating Compiler Correctness and Secure Compilation". In: *Programming Languages and Systems - 29th European Symposium on Programming, ESOP 2020, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2020, Dublin, Ireland, April 25-30, 2020, Proceedings*. Ed. by Peter Müller. Vol. 12075. Lecture Notes in Computer Science. Springer, pp. 1–28. DOI: 10.1007/978-3-030-44914-8_1. URL: https://doi.org/10.1007/978-3-030-44914-8_1.

2019 Carmine Abate, Roberto Blanco, Deepak Garg, Catalin Hritcu, Marco Patrignani, and Jérémy Thibault (2019). "Journey Beyond Full Abstraction: Exploring Robust Property Preservation for Secure Compilation". In: *32nd IEEE Computer Security Foundations Symposium, CSF 2019, Hoboken, NJ, USA, June 25-28, 2019*. IEEE, pp. 256–271. DOI: 10.1109/CSF.2019.00025. URL: https://doi.org/10.1109/CSF.2019.00025.

Publications in Journals

2021 Carmine Abate, Roberto Blanco, Ştefan Ciobâcă, Adrien Durier, Deepak Garg, Catalin Hritcu, Marco Patrignani, Éric Tanter, and Jérémy Thibault (2021). "An Extended Account of Trace-relating Compiler Correctness and Secure Compilation". In: *ACM Trans. Program. Lang. Syst.* 43.4, 14:1–14:48. DOI: 10.1145/3460860. URL: https://doi.org/10.1145/3460860.

Informal and Work in Progress

2019 Carmine Abate, Arthur Azevedo de Amorim, Roberto Blanco, Ana Nora Evans, Guglielmo Fachini, Catalin Hritcu, Théo Laurent, Benjamin C. Pierce, Marco Stronati, Jérémy Thibault, and Andrew Tolmach (2019). *When Good Components Go Bad: Formally Secure Compilation Despite Dynamic Compromise*. arXiv: 1802.00588 [cs.CR].

Awards

CSF'19 **Distinguished Paper Award at CSF 2019 (Computer Security Foundations Symposium)**
For our paper *Journey Beyond Full Abstraction: Exploring Robust Property Preservation for Secure Compilation*

ESOP'20 **Nominated for the Best Paper Award at ETAPS 2020 (European Joint Conferences on Theory and Practice of Software)**
For our paper *Trace-Relating Compiler Correctness and Secure Compilation*

Teaching

Foundations of Programming Languages, Verification, and Security, *Winter Semester 2023-2024, Ruhr Universität Bochum, Bochum, Germany*
Teaching Assistant
Teaching based on the second volume of Software Foundations

Writing and Verifying Functional Programs in Coq, *24-31 August 2019 at INSA, Lyon, France*
Summer School on Cryptography, Blockchain, and Program Verification, Mathinfoly 2019
Helped adapting the course material, and conducted lab sessions

Service

OOPSLA 2024 **Artifact evaluation committee member**

POPL 2024 **Sub-reviewer**

POPL 2023 **Artifact evaluation committee member**

POPL 2023 **Student Volunteer**

Journals **Sub-reviewer**
RV, JFP

Languages

French **Native**

English **Fluent**

German **Beginner**