Sophie Fortz, Ph.D.

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Employment History

Oct. 2023	**Postdoctoral Researcher.** PRECISE, NaDi, Faculty of Computer Science, University of Namur, Belgium.
Oct. 2020 – Sept. 2023	**PhD Student under FRIA Grant (FRS-FNRS).** PRECISE, NaDi, Faculty of Computer Science, University of Namur, Belgium.
Sept. 2019 – Sept. 2020	**PhD Student.** PRECISE, NaDi, Faculty of Computer Science, University of Namur, Belgium.

Education

2019 – 2023 **Ph.D. in Software Engineering.**
Thesis title: *Learning Featured Transition Systems.* Supervisors: Dr. Gilles Perrouin & Prof. Patrick Heymans. University of Namur, Namur, Belgium.

2017 – 2019 **M.Sc. Computer Science. (Magna Cum Laude)**, specialising in Software Engineering, University of Namur, Namur, Belgium.

2014 – 2017 **B.Sc. Computer Science.) (Cum Laude)**, mathematics and english options, University of Namur, Namur, Belgium.

Community Service

Program Committees

SPLC: ACM Software Product Line Conference (Publicity Chair), 2024.
ESEC-FSE: ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (Artefacts), 2023.
SPLC: ACM Software Product Line Conference (Demonstration & Tools), 2023.

Other Community Services

Computer Science Faculty Council: Scientific representative.
Students Fairs: Representing and promoting the Computer Science Faculty at several Students Fairs;

Teaching

2019-2023 **Software Testing:** project supervision, MSc Level, University of Namur.

2019–2022 **Mathematics Fundamentals for Computer Science:** exercise sessions on recurrent equations and cryptography basics, BSc Level, University of Namur

2020-2021 **Introduction to the Scientific Approach:** project supervision, 2021, BSc Level, University of Namur.

Recent Projects

LIFTS — Learning Featured Transition Systems. Funding: FRS-FNRS. Competitive FRIA Grant obtained for my PhD. Keywords: Featured Transition Systems, Automata Learning, Deep Learning.

VeriLearn — Verifying systems that learn. Excellence of Science (EOS) project, 2018–2023. I work on this project for over a year, first as a Ph.D. student, then as a postdoctoral researcher. Partners: KUL (coordinator), ULB. Keywords: Machine Learning, Testing, Modelling.

Miscellaneous Experience

2019-2023 — **ALMIN board member and president**, University of Namur, Belgium. The ALMIN is the alumni association of the computer science faculty in the university of Namur. This group organise activities for all the master and bachelor students who got their degree in the faculty. I am a board member of the association since 2019 and in 2021, I took the presidence.

2019 — **Research internship**, Department of Computer Systems and Computation, Polytechnic University of Valencia, Spain. During my master thesis, I have done three months of research at the polytechnic university of Valencia (Spain), under the supervision of Prof. German Vidal. My work on concolic testing for logic programming was nominated for the Jean Fichefet award (best master thesis award).

2017 – 2019 — **CSLabs secretary and board member**, Computer Science Labs (CSLabs), Namur, Belgium. CSLabs is a non-profit organisation founded by students from Unamur's Faculty of Computer Science, in order to promote computer science externally and provide trainings in different fields by and for students.

Publications

1. **Fortz, S.** (2023). Variability-aware behavioural learning. *Proceedings of the 27th ACM International Systems and Software Product Line Conference, Tokyo, Japan.*
2. dos Santos, E. L., **Fortz, S.**, Schobbens, P.-Y., & Perrouin, G. (2022). Identifying architectural smells in self-adaptive systems at runtime. *13ème édition de la Conférence francophone sur les Architectures Logicielles (CAL).*
3. Lima dos Santos, E., **Fortz, S.**, Schobbens, P.-Y., & Perrouin, G. (2022). Behavioral maps: Identifying architectural smells in self-adaptive systems at runtime. In P. Scandurra, M. Galster, R. Mirandola & D. Weyns (Eds.), *Software architecture* (pp. 159–180). Springer International Publishing.
4. dos Santos, E. L., **Fortz, S.**, Perrouin, G., & Schobbens, P.-Y. (2021). A vision to identify architectural smells in self-adaptive systems using behavioral maps. In R. Heinrich, R. Mirandola & D. Weyns (Eds.), *4th context-aware, autonomous and smart architectures international workshop (casa 2021).*
5. **Fortz, S.** (2021). Lifts: Learning featured transition systems. *Proceedings of the 25th ACM International Systems and Software Product Line Conference - Volume B, Leicester, United Kindom*, 1–6. https://doi.org/10.1145/3461002.3473066
6. **Fortz, S.**, Temple, P., Devroey, X., Heymans, P., & Perrouin, G. (2021). Varyminions: Leveraging rnns to identify variants in event logs. In A. Ampatzoglou, D. Feitosa, G. Catolino & V. Lenarduzzi (Eds.), *Proceedings of the 5th International Workshop on Machine Learning Techniques for Software Quality Evolution, Athens, Greece, 23 August 2021* (pp. 13–18). ACM. https://doi.org/10.1145/3472674.3473980

7 **Fortz, S.**, Mesnard, F., Payet, E., Perrouin, G., Vanhoof, W., & Vidal, G. (2020). An smt-based concolic testing tool for logic programs. In K. Nakano & K. Sagonas (Eds.), *15th international symposium on functional and logic programming (flops 2020), akita, japan* (pp. 215–219). Springer International Publishing.

Bibliometrics

Total Number of Publications:	7
Total Number of Citations:	17
H-index (Google Scholar):	3

See `https://scholar.google.co.uk/citations?user=cfV6X6kAAAAJ` for the full list of publications.