



Computer Science Applied to Astronautics

Work Experience

2017-2020 **PhD - Exposition and Control of the Interference Caused by Cache Coherence in Multicore COTS**, ONERA, Supervised by Claire Pagetti & Julien Brunel.

Education

2016-2017 **Advanced Master in Embedded Systems**, Institut Supérieur de l'Aéronautique et de l'Espace.

2015-2016 **Master 2 - Computer Science Research**, University of Toulouse III - Paul Sabatier, Focused on concurrent programming, logic, multi-agent systems, and scheduling.
M2 Recherche - Informatique et Télécommunications

2014-2015 **Master 1 - Artificial Intelligence & Pattern Recognition**, University of Toulouse III - Paul Sabatier.
M1 Intelligence Artificielle & Reconnaissance des Formes

2011-2014 **Computer Science degree**, ISTIC - Université de Rennes 1, Grade B pass.

2011 **High school diploma in sciences**, External candidate.

Skills

Linguistics French (native) & English (bilingual, TOEIC score: 990/990)

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| Computer Science | <ul style="list-style-type: none">○ Formal Logic (Modal, Fuzzy)○ Formal Specification (TLA⁺, UPPAAL)○ Distributed Computing○ Parallel Computing○ Embedded Systems○ UNIX Administration | <ul style="list-style-type: none">○ System Dependability (ALTARICA)○ Imperative Programming (C)○ Object Oriented Programming (JAVA)○ Dataflow Programming (VHDL, LUSTRE)○ Functional Programming (ERLANG, ELM)○ Web (HTML, CSS, JS) |
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Internships

- 2017 **Paid**, ONERA, Research Institute.
(6 months) Validating VHDL code using temporal logic.
- 2016 **Paid**, IRIT - ENSEEIHT, Research Institute.
(6 months) Research on the verification and the adaptation of distributed service protocols.
- 2013 **Paid**, Telecom Bretagne, Grande École in Brest.
(2 months) Study and validation of multiple distributed web hosting platforms for internal use.
- 2012 **Unpaid**, MerAlliance, SME in Quimper.
(1 month) Database reorganization and ETL process establishment. Study and establishment of a file and calendar sharing server according to existing constraints.

Teachings

- 2017 (4h) **AltaRica Modeling**, ISAE.
2018 (?h) **C Programming**, ISAE.
2018 (?h) **Lustre Programming**, ENSEEIHT.
2018 (?h) **SDL Modeling**, ENSEEIHT.

Miscellaneous

- B driving license, owns a car.
- Various projects on <https://github.com/nsensfel>.
- Organizes English board games sessions.

Publications

- HASE 2019 **Identification of Multi-Core Interference**, Co-Author.
ERTS 2018 **A Model-Based Certification Approach for Multi/Many-Core Embedded Systems**, Co-Author.
DASC 2018 **PHYLOG: a Model-Based Certification Framework**, Co-Author.
DCAI 2017 **Inference of Channel Priorities for Asynchronous Communication**, Main Author.