June Rousseau

PhD Student
Computer Science

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junerousseau.github.io

Education

Sep 2022 – Today **PhD - Computer Science**, *Aarhus University - GSNS*, Denmark

Sep 2021 – Sep 2022 **Pre-doctorate internships - CS**, *École Normale Supérieure Rennes*, France
Optional year between the first and second year of master dedicated to research internships

Aug 2020 – Jan 2025 **Master & Magistere - CS**, *École Normale Supérieure Rennes*, France
Highly selective school providing a diploma equivalent to a master's degree

Jan 2018 – Aug 2020 **Bachelor - CS and Mathematics**, *Universite Nice-Sophia Antipolis*, France
Double degree program providing 2 bachelor's degrees, in CS and in math (obtained with merit)

Professional Experience

Jan 2022 – Jun 2022 **Research Internship**, *Aarhus University*, Denmark
Internship in Logic and Semantic Team on a topic related to Cerise, a program logic to reason on capability machine based on CHERI architecture. Improvement of the model by adding the concurrency.

Sep 2021 – Dec 2021 **Research Internship**, *LIP Laboratory Lyon*, France
Internship with CASH Team on a topic related to the project VELLVM, a formal semantic of LLVM. Design a Domain-Specific Language with its semantic, which combine LLVM control-flow graphs and discharge the well-formedness of the labels.

May 2021 – Aug 2021 **Research Internship**, *CEA Paris-Saclay*, France
Internship with LIST Team on a topic related to static Analysis of cryptographic code at binary level. Improvement of state-of-the-art work of constant-time analysis at binary level to allow it to scale.

Jul 2019 – Aug 2019 **Internship**, *I3S Sophia-Antipolis*, France
Internship with C&A group. Development of a software for interactive visualization of graphs in Java, as part of a work about TSP solving with constraint programming. Tool for internal use.

Projects

Sep 2020 – May 2021 **Regular type inference in OCaml interpreter**, *Projet Master 1*
Integration of a verification tool in the OCaml interpreter. More precisely, work about the transformation of OCaml ordered pattern-matching into an unordered rewriting system.

Oct 2020 – Dec 2021 **VSL+ Compiler**, *Projet Master 1*
Creation of a compiler with OCaml from VSL+ (Very Simple Language Extended) into LLVM IR, as part as the M1 compilation course.

Computer Skills

- **Coq** Good
- **C** Good
- **Java** Notions
- **OCaml** Good
- **Python** Good
- **Bash** Notions

Languages

- **French** Native
- **German** A2
- **English** C1 *(TOIEC: 875)*
- **Danish** B1