# **Dorian Lesbre**

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dlesbre



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Born on March 17th, 1998 — Paris, France

Nationality: French

Current job: PhD student in computer science at CEA List

## Internships and professional experience

2023- PhD student at BINSEC, CEA, Paris-Saclay (abstract interpretation based on SSA)

 ${}_{2022\text{-}2023}\qquad 6\,month\,research\,internship\,at\,Log Sem, AU, Aarhus, Denmark\,(contextual\,refinement\,for\,capability\,machines)$ 

6 month research internship at BINSEC, CEA, Paris-Saclay (OS verification by abstract interpretation)

6 month research internship at Octopi, Chalmers University, Sweden (hardware design)

6 month research internship at Prove & Run, Paris (secure bootloader and chain of trust)

2 month research internship at LIRMM, Montpellier (ÉCO team, linear system modular resolution)

2018-2019 Oral math interrogator in preparatory school.

## Education

Paris – École Normale Supérieure – double bachelor in math and computer science. Started a MPRI masters.

2016-2018 Versailles – Sainte Geneviève – preparatory school in math MPSI – MP\*

2014-2016 Toulouse – Lycée Le Caousou - scientific high school cursus.

### **Skills**

French Native speaker.

English Fluent (passed Cambridge's Proficiency), lived 3 years in London.

German BI level, 2 linguistic exchanges in Germany in Iena (2011) and in Mannheim (2014).

Computers Skills:

Events

2022

202I

2018-2023

Advanced C, C++, Python, OCaml, GNU Make, Linux, Django, Coq, Voss II

Good LaTeX, beamer, HTML, CSS, LibreOffice, Windows, Git, Bash, SQL, Inkscape, Verilog, Docker,

CMake

Basic Rust, JavaScript, x86 assembly, Blender, Adobe Premiere and After Effects

Multiple large projects:

- Kotlin to x86 assembly compiler written in OCaml (github)
- Design and simulation of a simple processor in OCaml
- OS basic functions (keyboard/screen/ATA hard drive drivers, scheduler) in C and assembly
- Robot control program on Arduino and RaspberryPi written in C++ for France's Robotic Cup (gitlab)
- Secure bootloader and cryptographic algorithms (AES, ECC, SHA) in C
- Website for student events in Django ((interludes, photo server))
- ALU for arbitrary-precision arithmetic in Voss II (github)

Chief organizer for a 180-person school ski week in 2017.

Organizer of the ENS' gala in 2019 for 1000 participants.

### Interests and hobbies

Research program verification: formal methods, type systems, compilers, functional programming, static analysis...

Sport jogging, sailing, rock climbing, hiking and skiing.

Music plays the saxophone for 7+ years, currently in the school's band.

Tourism Europe, USA, Egypt, Jordan and Malaysia.

Last updated: October 15, 2023