

# Orégane Desrentes

✉ [oregane.desrentes@insa-lyon.fr](mailto:oregane.desrentes@insa-lyon.fr)

🌐 [www.oregane.com/](http://www.oregane.com/)

DOB: February 25, 1999

## Curriculum Vitae

### Education

- 2022-2025 **CITI, INSA Lyon**, *PhD supervised by Florent de Dinechin*.  
Arithmétique matérielle : opérateurs fusionnés et applications (20/10/2022-19/10/2025)
- 2021-2022 **CITI, INSA Lyon**, *6 months internship supervised by Florent de Dinechin*, Master Thesis :  
Optimisation of approximation and evaluation of elementary functions in Hardware.  
(21/02/2022-19/08/2022)
- 2021-2022 **Kalray**, *6 months internship*, Verification of Floating-Point operators.  
(23/08/2021-18/02/2022)
- 2020-2022 **Communication System Master M2**, *Double diploma with ENS Lyon*, EPFL, Lausanne.
- 2019-2020 **AVALON team, LIP, ENS Lyon**, *3 months internship supervised by Alain Tchana*, Hardware features for virtualization : Page Modification Logging and extensions, with SIMICS and Rocket Chip.
- 2019-2020 **Computer Science Masters M1**, ENS Lyon.
- 2018-2019 **CITI, INSA Lyon**, *6 weeks internship supervised by Florent de Dinechin*, Posit conversions, addition and exponential on FloPoCo.
- 2018-2019 **Bachelor in Computer Science**, ENS Lyon, Obtained with 15.32/20.
- 2018-2019 **Bachelor in Mathematics**, Université Claude Bernard, Lyon, Obtained with 12.8/20.
- 2016-2018 **MPSI-MP\***, *Maths and Physics with Computer Science Option*, Lycée Thiers, Marseille.
- 2016 **Scientific baccalauréat**, Lycée Fourcade, Gardanne, Obtained with Honours.

### Publications

- 2023 *Exact Fused Dot Product Add Operators*, Orégane Desrentes, Benoît Dupont de Dinechin, Florent de Dinechin, for *ARITH*
- 2023 *Exact Dot Product Accumulate Operators for 8-bit Floating-Point Deep Learning*, Orégane Desrentes, Benoît Dupont de Dinechin, Julien Le Maire for *DSD*
- 2023 *In-Place Multicore SIMD Fast Fourier Transforms*, Benoît Dupont de Dinechin, Julien Hascoët, Orégane Desrentes for *HPEC*
- 2022 *Using integer linear programming for correctly rounded multipartite architecture*, Orégane Desrentes, Florent de Dinechin, for *FPT*, hal-03844218
- 2022 *A Posit8 Decompression Operator for Deep Neural Network Inference*, Orégane Desrentes, Diana Resmerita, and Benoît Dupont de Dinechin, for *CoNGA*

### Technical Skills

Programming PYTHON, C, C++, CAML, VHDL, SCALA, JULIA  
Software L<sup>A</sup>T<sub>E</sub>X, GIT, FloPoCo, Coq, SIMICS, MODELSIM, QUARTUS, VIVADO HLS, METALIBM

### Languages

French Fluent

English Fluent

Italian Fluent

German Intermediate

C2 certified by the CAE

B1 certified by the KMK certification

### Interests

I like music and I played in ENS's band La Fanfarovis for 3 years. I now play in the university's orchestra Amosud. I was in the editing team for the ENS's newspaper La Tartine for two years.