

# Dorine CHAGNON

France  
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## Hard skills

**Programming :** Python, Java, C++, C, R, Matlab, Sagemath, Magma

**Software :** Wireshark, Proverif, Scyther

**Computer Science :** Network security, Protocol security, Secured implementations for cryptography, Parallel programming and on GPU, Data Bases, Blockchain

**Mathematics :** Asymmetric and Symmetric cryptosystems, Elliptic curve, Error correcting code, Information theory, Languages, grammars et automata, Machine Learning, Inferential Statistics, Quantum Cryptography

## Languages

**French :** Fluent

**English :** Professional proficiency

2017 Erasmus one-year stay  
- in Southampton  
2018 England – University of  
Southampton

Oct 2020 score **TOEIC : 970**

**German :** Basic notions

## Hobbies

### Music

Percussion and concerto flute in orchestra during 10 years

Bells ringer in English churches during 1 year

### Sport

Karaté Shotokan during 14 years

- France Kumite Cadet championship in 2012
- Black belt 1<sup>st</sup> dan

"I am a good listener of what people can suggest or complain.  
I am a team worker thanks to my various internships and my school projects."

## Training

- 2022-2025 PhD in Computer Science: Network Path Validation for Packets Delivery under the direction of Gérard Chalhoub and Kévin Thiry-Atighehchi  
University Clermont Auvergne
- 2020-2022 Master's degree in mathematics of information and **cryptology** with honours  
University of Rennes 1
- 2018-2020 Engineering degree in applied mathematics (Master's degree) (modelling, data analysis, optimization)  
National Institute of Applied Science (INSA) of Rennes
- 2015-2018 Undergraduate degree in mathematics with honours  
University Paris Diderot-Paris 7
- 2015-2018 Undergraduate degree in computer science with honours  
University Paris Diderot-Paris 7
- 2015 French general certificate of secondary education specializing in science, mathematics speciality and Latin option with honours  
Lycée Condorcet (94 210, France)

## Professional background

- Mar-Aug 2022 Internship in **cryptology** at Harmonic (Cesson Sévigné, France) under the direction of Nicolas Debomy  
Implementation of a cryptographic toolkit to protect the sensitive data of the products in the video chain
- June-Aug 2020 Internship in Data Engineering at Veolia Nordics (Stockholm, Sweden) under the direction of Jérémy Dessalines D'Orbigny  
Data studies of unpaid invoices and profit and loss in order to produce reports that meet customer needs
- June-July 2019 Internship in **Data Science** at Veolia S.A. under the direction of Hind Hafdi  
Study of time series on water data in order to forecast water consumption and detect leaks in the drinkable water network
- June-July 2017 Internship in neuroscience at Paris Descartes University under the direction of Selim Eskiizmirli  
Angle calculation and motion recording with Codamotion software  
Training workshop on virtual reality to study and heal the brain
- June 2016 Internship in **network** at Paris Diderot University under the direction of Juliusz Chroboczek  
Installation and administration of experimental routers using Babel and HNCP (Home Networking Control Protocol) protocols  
(presentation during the IETF 96 in Berlin in July 2016 by Juliusz Chroboczek)