

Summary

I am a first year Master's student in computer engineering at Université Libre de Bruxelles, holding a bachelor degree in engineering sciences and also currently pursuing a bachelor in physical science. I have a great interest in the information technologies, cryptography, and a particular love toward physics. I am actively looking for an internship in the information technologies industry, both for my studies and to get more rounded by getting a first experience in the industry, after jobs and an internship in research at my university.



- **Status:** M.Eng. Computer Engineering, B.Sc. Physics, Student-assistant
- **Fields:** Cryptography, Databases, Data science, quantum information

Education

2021 - Present	Master in Computer Engineering	Université Libre de Bruxelles
<ul style="list-style-type: none"> ➤ Relevant courses : Quantum information and computation, Protocols, cryptanalysis and mathematical cryptology, Data warehouses, Advanced databases. ➤ My engineering curriculum is my main formation at University. It provides me theoretical concepts and useful tools to build a digital modelisation of the outside world, manipulate and protect information. 		
2020 - Present	Bachelor in Physical Sciences	Université Libre de Bruxelles
<ul style="list-style-type: none"> ➤ Relevant courses : Quantum mechanics, Special relativity, Electromagnetism. ➤ In parallel with my engineering curriculum, I am pursuing a degree in the Faculty of Sciences. It provides me with a more theoretical approach than the courses in my engineering curriculum. 		
2018-2021	Bachelor in engineering sciences (graduated)	Université Libre de Bruxelles
<ul style="list-style-type: none"> ➤ Minor in informatics. Relevant courses : Object oriented programmation, Operating systems, Operational research, Software engineering, Electronics, ... ➤ Graduated with "<i>Magna cum laude</i>" mention : GPA 3.3/4. 		
2012-2018	Higher education diploma (CESS)	Athenée Robert Catteau
<ul style="list-style-type: none"> ➤ "Mathematics and science" option ➤ Graduated with "<i>Magna cum laude</i>" mention. 		

Academic projects

M. Eng.

- Secure chatting application.
- Compiler (fictif language).
- Monte-Carlo Tree Search for checkers game (Python)
- Implementing a new feature in *PostgreSQL* (C) : join selectivity estimation for range types

B. Sc. Physics

- Exposition at Printemps des Sciences (ULB) : *Acoustic Levitation*.

B. Eng

- 1st year project : solar dryer for pepper seeds, to use for Kampot pepper, in Kampot, Cambodia. We've designed, dimensionned, built the prototype.
- 2nd year project (biomedical-oriented) : motorisation of a 3D-printed hand to allow it to hold an egg without breaking it. Fishing lines and motors were used to mimic the tendons.
- Academic informatic projects : Scrabble in Python, Tower Defense in Java (JavaFX), Reversi (Minimax AI) in C++, project manager software in JavaFX.

»»» Expérience

02/2022-Present	Co-author of a university syllabus	ULB – Faculté des Sciences
<ul style="list-style-type: none">➤ In group of three students, we are currently writing course notes for the "Introduction to Quantum Mechanics" course in ULB, 2nd year bachelor in physical sciences, under the supervision of the Professor (Serge Massar). We aim to make it the official course content.➤ Link to the course page : PHYS-F203		
2019-Present	Student representative	ULB – Ecole Polytechnique de Bruxelles
<ul style="list-style-type: none">➤ I represent the students in my faculty in several ways: on the Faculty Council, on the "Filière informatique" Commission, on the Pedagogical, Teaching and Strategic Commissions.➤ I have also been a student delegate since my second year at the University in order to organise contacts with the professors.		
2021-Present	Member of FabLAB ULB's student committee	ULB – FabLAB
<ul style="list-style-type: none">➤ Manager of a student association from several faculties.➤ The FabLab ULB is a complex within the digital network of FabLabs that finds its <i>raison d'être</i> in a mixture of knowledge, know-how, collaboration, with the aim of acting on the world around us.		
07 - 08/2021	Summer student intern (Applied Physics)	ULB - Service de métrologie nucléaire
<ul style="list-style-type: none">➤ I received a research initiation grant in order to discover the profession of researcher and to contribute to the work of a research department: the nuclear metrology department.➤ Within a research team, I was in charge of designing an optimisation algorithm for a machine used for proton therapy (IBA ProteusOne).		
2020-2021	IT Administrator	ULB - Bureau Etudiant de Polytechnique
<ul style="list-style-type: none">➤ Management, in duo, of the IT infrastructure of the student association of my faculty. Mainly: server management, website management (Wordpress), mailing lists.➤ Development of some IT projects targeting the success of the Faculty's students: Algo-raires, an algorithm for optimal scheduling of oral exams according to individual student preferences, and a site providing an "Exam Question Bank".		
2020-2022	Student-assistant (x2)	ULB - Ecole Polytechnique de Bruxelles
<ul style="list-style-type: none">➤ In a group of 5 students, we worked on the improvement of the materials of the Analysis courses of the first two years of the Bachelor of Civil Engineering, taught by Pr. A. Delandt-sheer; and with a student, for the Linear Algebra and Geometry course of Pr. J. Dohet-Eraly (MATH-H1001, MATH-H1002, MATH-H1003, MATH-H2000)➤ Management of a document of several hundred pages in \LaTeX. Creation of figures (2D, 3D) using the TikZ package. Illustration of vector fields and 3D functions using the pgfplots package.		

»»» Main skills

- » Tools : \LaTeX , Python, Java, SQL, C++, Linux (Arch, Ubuntu), Office suite.
- » Technologies : Databases, Data visualization, Genetic algorithms.
- » Qualities : curious, efficient, hardworking, passionate, careful, organised.

»»» Personal

- » Hobbies : Boxing, soccer, reading, programming.
- » Languages : French (mother tongue), English (professional use), Dutch (basic knowledge), Arabic (basic knowledge).