

# Elie Dumont

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Location: Rennes, France

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## PROFESSIONAL EXPERIENCES

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### Bioinformatics Researcher Internship

May 2024 – Jul 2024

Supervised by Veli Mäkinen of Team Genome-Scale Algorithmics – University of Helsinki

Helsinki – Finland

- Worked on integrating symmetric chaining for sequence alignments in GraphChainer based on a previously published paper by Mäkinen and al.

### Research project

Oct 2023 – May 2024

Supervised by Caroline Collange of Team PACAP – Inria/IRISA

Rennes – France

- Worked on developing an Arduino-based software to reverse-engineer electronic components with the aim to preserve obsolete components such as a Mitra-15 CPU

### Bioinformatics Researcher Internship

May 2023 – Jul 2023

Supervised by Guillaume Beslon of Team BEAGLE – Inria

Lyon – France

- Developed population variations in Aevol, the in-silico model of evolution developed by my supervisor Guillaume Beslon and his team

### Beekeeper

Jul 2019, Jul 2020, Jul 2021, Jul 2022, Jul 2023

Le Rûcher Saint Ambroise

Châteauneuf de Galaure – France

- Assisted the beekeeper in harvesting and potting honey, treating bees against varroa, painting hives, and transhumances

### Archives

Aug 2022

Médipôle de Savoie

Chambéry – France

- Sorted patient files
- Worked with a team of 3 people, and met the hospital staff

### Maths Researcher Internship

Mar 2018

LAMA

Chambéry – France

- Observed how mathematicians model population variations
- Learned about various fields in maths

## EDUCATION

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### Bachelor's degree in Physics

Université de Rennes

Sep 2024 –

Rennes - France

### Master's degree in Computer Sciences

Ecole Normale Supérieure

Sep 2023 –

Rennes – France

### Bachelor's degree in Computer Sciences with honors

Ecole Normale Supérieure

2023

Rennes – France

### CPGE MPSI/MP/MP

Lycée Blaise Pascal

Sep 2019 – Jul 2022

Clermont-Ferrand – France

## PROJECTS

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### **Simplex Visualisation**

*Rust, OpenGL, Git*

[Source Code](#)

- Developed a visualization of the simplex algorithm using Rust and OpenGL
- Project done with two other members

### **Basic Assembly Compiler**

*OCamL, Python, Git*

[Source Code](#)

- Designed a language with a grammar from scratch, targeting a simple assembly made specifically to simulate basic ant behaviour
- Developed the compiler targeting this assembly from the developed language
- Project done with two other members

### **nChess**

*C, Git*

[Source Code](#)

- Developed a chess engine from scratch targeting the Nspire calculator serie

You can check my other projects on [\*\*Github\*\*](#)

## SKILLS

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**Programming** : C/C++, OCamL, Python, Rust, Lua, Assembly (ARM, z80)

**Dev Tools** : Visual Studio Code, Git, Github, Gitlab,  $\text{\LaTeX}$ , Matplotlib, Numpy

**Languages** : French, English

**Hobbies** : Volleyball, Tennis, Piano, Music