## PROGRAMMING LANGUAGES

**Python, C, LaTeX**

**Isabelle(HOL), Ocaml, Git**

**Java, Java/TypeScript**

**B (Atelier B)**

**HTML, CSS, React**

**Go, Assembly**

## LANGUAGES

**French** Native

**English** IELTS C1

**German** Goethe Zertifikat B2

## CONTACT


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vincent-trelat


# VINCENT TRÉLAT

Engineering Computer Science student specialized in Formal Methods and their Applications interested in a six-month internship

## EDUCATION

**Technical University of Munich, CIT Department** 2022 - 2023
**Garching, Munich, Germany**

- Exchange during Winter Semester, Formal Methods: *Automata and Formal Languages*, Prof. Javier Esparza, *Semantics* and *Lambda Calculus*, Prof. Dr. Tobias Nipkow, *Advanced Computer Architecture*, Prof. Dr. Hans Michael Gerndt, *Recent Advances in Model Checking*, Maximilian Weininger, Stefanie Mohr

**École Nationale Supérieure des Mines de Nancy** 2020 - 2023
**Engineering student, Nancy, Grand-Est, France**

- **Computer Science Department**: Foundation of Computing, Programming Languages, Secure Coding, Software Engineering, Cyber-awareness, Data Analysis, Deep Learning. Specialization in **theoretical computer science** and **formal methods**.
- Award of a grant for academic excellence by the Grand-Est region.

**CPGE in Science** 2018 - 2020
**Lycée Pothier, Orléans, France**

- A French two-year intensive undergraduate program in maths, theoretical physics and computer science prior to the most prestigious French colleges and universities.

**Highschool, Scientific stream** 2015 - 2018
**Lycée Charles Péguy, Orléans, France**

- Scientific Baccalaureate with European distinction in English with highest honours and congratulations from the jury.

## PROFESSIONAL EXPERIENCE

**TUM, Munich, Germany** 03/2023 - 08/2023
**Research internship supervized by Prof. Dr. Tobias Nipkow**

Formal verification in Isabelle/HOL of Hopcroft's algorithm for minimizing DFAs including runtime analysis, based on previous work of Dr. Peter Lammich.

**Clearsy, Aix-en-Provence, France** 05/2022 - 09/2022
**Formal Methods R&D Engineer Internship**

Formal justification of the safety of the real-time execution of the Clearsy Safety Platform (CSP) with the B Method and Isabelle/HOL.

**Loria, Nancy, France** 09/2021 - 08/2022
**Research Internship in Formal Methods**

*"Formal verification in Isabelle/HOL of an algorithm computing the strongly connected components of a graph"*, **publication** in the **Archive of Formal Proofs**.

**Valve Précision, Saint-Michel-sur-Orge, France** 06/2021 - 07/2021
**Factory Operator Internship**

**Private teacher (Math, Physics and Computer Science)** Casual

## PROFILE

- Semi-professional photographer, former trumpet player and self-taught guitarist.
- **Advent of Code**: Best rank in 2021: 261 / 230,000 (approx.), Best rank in 2022: 186 / 250,000 (approx.)