Alexandre Malfreyt

Tech-savvy and curious computer engineering student 🧑‍💻

/AlexMalfr

/alexandre-malfreyt

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From Paris area, France

🎓 Education

Polytech Paris-Saclay, Paris-Saclay University
2024 - 2027

Engineering degree in Computer Engineering, Apprenticeship program
Computer Science & Mathematics Engineering

- *Advanced Programming (C++, Java, Python), Data Structures & Algorithms,*
- *Low-level architecture, Operating Systems, Compilation, Networks,*
- *Machine Learning & Data Science (Scikit-Learn, TensorFlow),*
- *Mathematics for Computer Science (Analysis, Probability, Statistics),*
- *Economics, Communication, Company Environment & Management, Contract Law, Eco-design*

IUT d'Orsay, Paris-Saclay University
2022 - 2024

University Diploma in Technology (DUT), Computer Science
Application Development: Design, Development, Validation

- *Programming & Algorithms (C++, Java, Python), Databases (SQL), Web Development (PHP, HTML, CSS, JS), UI/UX (C#),*
- *Software Engineering (Agile, UML, Design Patterns, Testing),*
- *Operating Systems & Networks (Linux, Raspberry Pi), Hardware Architecture (x86 Assembler),*
- *Mathematics (statistics, graphs, coding),*
- *Contract Law and Digital Law (GDPR)*

Polytech Paris-Saclay, Paris-Saclay University
2021 - 2022

Integrated Preparatory Class in Engineering School

- *Computer Science (C++, Python), Introduction to Machine Learning,*
- *Digital Electronics, Logic Problem Solving,*
- *Mathematics*

LPO Gaspard Monge - Savigny-Sur-Orge
2018 - 2021

Baccalauréat général (High School Diploma) - With Highest Honors
Specialty in Computer and Digital Sciences and Mathematics - European English Section

💼 Experience

Synchrotron SOLEIL (ISAC)
Oct 2024 - Sep 2027

Apprentice Engineer - Computer Engineering

Software development for integrated acquisition and control systems (Tango Controls), Acquisition system maintenance and evolution (Flyscan), Migration from older systems to Flyscan & custom development for beamline needs

Linutop
April - July 2024

Software Developer Internship

Developed a dynamic display and kiosk application for Linux environment on embedded systems (Raspberry Pi)

3D-EXPERT.FR / Wanhao France
June - July 2022

Internship

Customer and technical support, Stock management and process automation via Google Sheets, Logistical assistance

🔀 Projects

Advent of Code
2022-
Participation in programming challenges each year in the form of an advent calendar.

Home Automation Installation
2023-
Installation of a home automation system with Home Assistant.

Personal Projects
Various small projects available on GitHub and on my personal website.

⚙️ Skills

Operating Systems
Windows, Linux

Programming Languages
Python, SQL, JavaScript, Java, C++, C#, PHP, HTML, CSS

Software
Git (GitHub, GitLab), VSCode, Visual Studio, Oracle, Figma, Notion, GIMP, Autodesk Fusion 360, SolidWorks

Tools & Frameworks
Tango Controls (PyTango, C++ Tango), CMake

🈂️ Languages

French Native speaker

English Professional proficiency
TOEIC Mock Test: 970/990 (CEFR C1)

Japanese Basic
JLPT N5 (CEFR A1): 96/180

German Basic