LOUIS CATAR

Student engineer in double-degree Arts et Métiers ParisTech (ENSAM) / ETS Montréal

CONTACT



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LANGUAGES

FRENCH: mother tongue

ENGLISH: autonomous, language internship in **Great Britain**

SPANISH: B1, academic

LATIN (7 years), GREEK (5 years)

CAD SOFTWARES

CATIA Solidworks Fusion 360 Inventor Creo Parametric



OFFICE AUTOMATION - COMPUTING

Microsoft Office Python Arduino. C++ Matlab



TECHNICAL EXPERTISE

- Additive manufacturing
- Turning, Milling, Welding
- Intellectual property patents
- Concepts in data science

FREE TIME



Responsible for the students' workshop: wood and metal work, technical support



OHS (September 2019)



DIY: projects in mechanics and electronics (robot, drone)



Skiing, climbing



History: writing and editing shows



Scouting (7 years)



BIA: Aeronautics Initiation Certificate



Drone: Aerial shots

INTERNSHIPS AND PAID ACTIVITIES

2020 (5 months) | Trainee engineer | TECHNICATOME - CEA DAM

- Design of a test bench for a nuclear maintenance robot (Thales),
- Head of studies for interdisciplinary projects for the Megajoule Laser of the French Atomic Energy Commission - Directorate of Military Applications
- **Defense Empowerment**

2020 (2 months) | Aviation contract mission| Daher Aviation

- Design of a mechanical arm for the Paris Air Show
- Realization of graphic rendering

2019 - 2020 (1 year) | Fablab Manager | ENSAM

- Coaching and training of campus staff in additive manufacturing,
- Laser cutting and prototyping methods
- Machine maintenance and troubleshooting

2019 - 2020 (1 year) | Resident technical manager | ENSAM

- Campus Standards and Safety Working Group
- Management of the compliance of the students' machine park

2019 (1 month) | operator internship | NEXTER

- Retrofit" on a chain of armored vehicles
- Design of solutions improving the ergonomics of maintenance

COMPETITIONS AND PROJECTS

2020 | Creation of the project « Gadz'Arts vs Covid » | Union des Elèves

- Pilot of the federation of student makers intercampus
- Setting up and management of a technical working group proposing low tech solutions against the health crisis.
- More than 20,000 visors and 10,000 masks produced in multi-sites
- Responsible and management of a collect of €12,000

Sept 2019 – Feb 2020 | Career Olympics | Worldskills France

- Team category: "Industrial Production »
- CAD, welding, boilermaking, machining, electronics
- Silver medal Grand Est region

Apr – June 2019 | « Génération ISS » contest | CNES

- **CAD Manager**
- Design and production of a demonstrator for astronauts on the International Space Station (ISS)
- National Center for Space Studies

Janvier 2020 | Design Challenge | ENS Lyon

- Design of a leg orthosis for the biomechanics lab
- Using generative design for 3D printing

Nov 2018-March 2019 | 2nd prize | Australian eChallenge

- Research work on a new 3D printing process and realization of a prototype
- \$5,000 award at the international final

TRAINING

2016 - 2018

2018 - 2020

2020 - 2022

Preparatory classes PTSI - PT

Lycée Dorian (75)

ARTS ET MÉTIERS **PARISTECH** General engineer

ETS Montréal MSc in Mechanical Engineering (Research)