

Juliette Le Ferrand

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Working Holiday Visa

SUMMARY

I have taken part in **development projects** for products under **high requirements** within international industrial leaders and start-ups. My experience demonstrates my ability to **solve problems** and capacity to **adapt easily in different environments**. My objective is to be part of a team where we **progress and offer better solutions** and where, as an individual, my **willingness to learn on the job** and my **curiosity for sustainable answers** play a role in the **company's overall success**.

SKILLS

Knowledge and competencies

General Mechanics | Carry out **dimensioning calculation (GD&T)** and **finite element** analysis, perform **thermodynamics** calculation and **fluid mechanics** studies

Mechanical design | Create **technical drawings, control drawings, 3D parts** and **assemblies**, create proof of design

Product development | Create **concept**, elaborate **design requirements**, create **technical specifications**, carry out product/process **testing, qualification** and **validation**, achieve **behaviour studies**

Risk management | Create **Risk analysis** and manage **Change Control** process

Project management | Draft **Specification**, manage **follow-up planning** with MS project and **lead meetings** (English & French)

Languages | Fluent in **English & French**, intermediate in German, beginner in Polish

Software

Office pack | Mastery of Excel, Word, MS project, Outlook, Publisher tools

Computer Aided Design | Mastery of Solidworks, Creo, Catia V5, AutoCad

Management system | SAP, MasterControl (Electronic Document Management System)

Simulation | SimXpert, Ansys Fluent

Finite Element Method | RDM6, Matlab

Soft skills

Demonstrate hunger to continuing professional development | Detail-oriented | Problem solving | Team work | Demonstrate initiative (Volunteering) | Creative (music, drawing & painting) | Open & Dynamic (Student Office member, events organization, Youth Recreation Leadership Certificate) | Sportive (Handball, ski, running)

PROFESSIONAL EXPERIENCE

Project manager Assistant – Part Time

October 2022 - present

Tech for Good Canada | Toronto

Assist in the creation of an card-based workshop on the **impact of digital media on physical and mental health** inspired by the Climate Fresk (La Fresque du Climat) and the Digital Collage (La Fresque du Numérique)

Design control coordinator

January 2022 – September 2022

Sanofi | France

Sanofi is a pharmaceutical laboratory developing prescription medicines (diabetes, rare disease) public health products and vaccines.

Coordinated design control process 2 first phases of a combined drug device: a pre-filled syringe with safety system

- Elaborated the **strategy** of the design control process through the **Design & Development Plan** document
- Drafted the **design control deliverables** for **Phase 1: Design Input & Output** and **Phase 2: Design Verification**: Design Input requirement, Design Specification, Design Verification, Bill of Materials

- **Managed** project and led **follow-up meetings**
- Led and organized **Design Review meeting (15 persons)** for the **Design Verification launch**
- Worked with the product quality, regulatory, production quality, American partners of the laboratory, life cycle management and project management departments

Product designer

December 2019 – December 2021

Aptar Pharma | France

Aptar Pharma is a leader in pharmaceutical plastics processing which develops drug delivery systems as pumps, valves, nasal sprays, pulmonary devices, injectable systems.

Developed a life-saving drug nasal spray dedicated to the treatment of anaphylactic shock and opiates overdose

- Achieved **dimensional analysis** and **capability process analysis** (CC, Cpk, Cp coefficients) and provided **technical reports** to ensure the progress of the **qualification and validation** of the plastic injection molds
- Created **control plans (up to 50 dimensions)** for the production of **7 components** and **final devices**
- Developed and carried out **experimental tests** and **studies at the limits** on the assembly machine
- Carried out the study of the **impact of aging** on the functioning of the product
- Drafted **design control deliverables, technical risk analysis and design justification file**
- Optimized product **tolerancing** through tolerance **stack-up analysis**
- Carried out **product presentation** to new recruits
- **Investigated** for response to **non-compliance customer feedback** through X-Rays, tomography, machine test, optical & profilometer measurement

Engineer Apprentice

September 2018 – August 2019

Robocath | France

Robocath is a medtech which designs, develops and commercializes robotic solutions to treat cardiovascular diseases.

Designed and manufactured a transport case of 1000 euros for a **surgical robot** designed to treat cardiovascular diseases estimated at 300,000 euros

- Achieved the **design process** including technology watch, search for suppliers, concept development, order and purchase management
- Achieved the **manufacturing process** including the conditioning and installation process
- **Manufactured the transport case**
- Drafted the **regulatory documentation: Design History File and Device Master Record** according to ISO 13485 and European Regulation

Engineer Assistant

July 2018 – September 2018

Robocath | France

Set up the **tools for the industrialization** of a medical device

- Drafted of **manufacturing ranges** necessary for device sub-assembly
- **Designed a crankcase conformer** obtained by plastic injection necessary for the medical device housing parts and **implementation of workpieces**
- Achieved **calculation of dimensioning** and **tolerance stack-up analysis**

EDUCATION

Master's degree in Mechanical Engineering

2019

National Institute of Applied Sciences Rouen Normandy | France

International Experience in ERASMUS in Polytechnical University of Cracow, Poland

High School Diploma in Science

2014

Lycée Louis Liard | France

European section and Maths & Music options