Vianney Grenez

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EDUCATION

UC Berkeley

MEng in Mechanical Engineering Concentration in Robotics and Controls May 2022 | Berkeley, CA | GPA: 3.85/4

Arts et Metiers ParisTech

Masters in Mechanical Engineering May 2022 | Paris, France | GPA: 4/4

Lycée Sainte Geneviève

BS equivalent in Math and Engineering May 2018 | Paris, France | GPA: 3.8/4

SKILLS

CAD softwares • Python • KiCAD • MatLab • Arduino • MSPlanner Design • Communication • Problem solving • Leadership

COURSEWORK

Product Design • Fabrication processes • Mechanics • Electrics •

- Hydraulics and fluid dynamics Thermal Data Science Mechatronics
- Prototyping Machine learning Control Material Science •

LANGUAGES

French, English, Spanish and notions of Malagasy and Chinese

EXPERIENCE

HARTING Americas, Electrical connectors | Innovation Engineer

August 2022 - Present | San Francisco, CA

- Product development, from concept to mass production (Injection molded, turned and die cast parts..), ensuring UL/IEC compliance through DFMEA, thermal, vibration, environmental and structural testing.
- Innovation and prototyping: filed 20+ patents (1 granted), Completed quick prototyping iterations using laser cutting, CNC, lathe, electronics (PCB design) and 3D printing. CAD designs on Siemens NX.
- Led a data center liquid cooling research project with UC Berkeley, managing a team of 4 engineers, developing a test bench, and conducting thermal simulations.
- Established an innovation hub, securing early-stage opportunities, defining business models, and collaborating with industry leaders in many different markets (OCP members, semiconductors, aviation..)

KARENJY (First African car maker) | Mechanical Engineer, Project leader

January 2021 - August 2021 | Fianarantsoa, Madagascar

- Improved the fabrication process of the composite door of the car model MAZANA II
- Reduced the maintenance operations on the machine park by 50% by rethinking the process, defining preventive maintenance tasks on every machine (hydraulic press, bending machine, lathe, milling machine...)
- Create an entire hydraulic circuit to enhance the company's fire safety. Defining pressure/ flow rate levels, sizing hydraulic components, tubing. I ordered and installed it all on the site.

Rossini Energy | Solar carport Product Designer and Project Manager

September 2020 - January 2021 | Lille, France

- Created, designed, and built a 50,000 € product for a thriving start-up. Now best seller of the company.
- Prototyped the first turnkey design wooden modular solar carport. Mechanical and electrical design.
- Selected and established contact with worldwide suppliers, negotiated budgets, managed the project, defined the delivery process and the assembly plan.

Hephais | Milling, Lathe, Submerged arc Welding operator

Summer 2018 | Rosult, France

• In charge of a nine machine park in the metallurgy sector. Operating and optimizing the fabrication process.

RELEVANT PROJECTS / AWARDS

General Motors / UC Berkeley | Head of Control Team in a capstone project

September 2021 - May 2022 | Berkeley CA

• Created a prototype for a proof of concept: adding a cluched axle in an electric car to save energy

CNES | Winner of the Parabola National Challenge

2019 - 2020 | Merignac, France

- Designed an experimental autonomous drone fitting zero-gravity to take videos in inhabited space missions
- Tested the device in real condition in an Airbus Zero G during a research campaign.