

Abdou BALDET

MECHANICAL DESIGN ENGINEER

Personal Info

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Address

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Education

09/2009 - 06/2010

Master 2 , Mechanical Engineering and Mechanical Design

Université Joseph Fourier, Grenoble

Apprenticeship Training at FAURECIA (91)
Design of a Test Bench for Side Airbag Deployment

06/2007 - 09/2008

Licence, Mechanical Engineering and Mechanical Design

Université Joseph Fourier , Grenoble

3-month internship at SIMAP-EPM (38) - Design and development of a Peltier device.
Design and development of a Peltier device for a silicon crystallization furnace

Skills

Technical skills

Skills:

- Design and development of Products and Special machinery
- 3D and 2D CAD software and Numerical simulation
- Drafting technical analyses specifications and participating in project planning and budgeting
- Analysis and creation of contractual technical specifications
- Project oversight up to the delivery phase
- Collaboration with clients/operators for qualification testing
- Preparation of technical documentation
- Patent search strategy

Areas of Expertise:

- Pressure Vessels
- Vacuum Techniques
- Opto-Mechanics
- Welded Frames
- Sheet Metal Work
- Instrumentation

Tools:

- SOLIDWORKS
- PDM tools
- ANSYS, COMSOL
- MS Word, Excel, PowerPoint, Power BI
- ORBIT (Patent Search software)

Languages

English



TOEIC Score : 750

French



Work History

09/2024
- present

Mechanical Design Engineer - Static and Fatigue/Endurance Test Bench

CETIM, 42

- Design of test benches for characterization, qualification, or certification of industrial components: stress levels up to 400 tons
- Industry: rail, aeronautic, nuclear, biomedical, off-shore, industrial production
- Mission: pre-project, design, manufacturing file
- Standardization of CETIM equipments

04/2024
- 07/2024

Research Patent Engineer - Intellectual property

LAVOIX

- Proposal of patent search strategies for clients and patent engineers
- Patent search, analysis and selection of results to present to clients
- Preparation and writing of reports and research reports in English and French

08/2023
- 03/2024

Mechanical Design Engineer - Handling/Lifting - Aeraulics

RIO TINTO, Saint-Jean de Maurienne

Mechanical design on aluminum reduction tank
CCU Project: Capture, Concentration and Use of CO2

- Design and development of lifting/handling equipment
- Design and development of a signaling device
- Aeraulic measurements: Measurements of pressures, speeds and flow rates in the duct, evaluation of the compliance, R&D of a new duct measuring device

06/2022
- 04/2023

Mechanical Design Engineer - Laser cutting machine

REFLEX INGENIERIE, 69

Engineer Consultant Research & Development Innovation | Client: GRAVOTECH
Conception and development of a new range of laser engraving and cutting machines
Analysis of specifications, proposing innovative solutions, design, development, prototyping
Definition of optical path and design of opto-mechanical elements
Design and development of the Human-Machine Interface (HMI)
Conception and integration of electrical and electronic control and power components

10/2021
- 06/2022

Mechanical Designer - Refrigerated furniture and display cases

MARREL CONCEPT, 69

Design and drafting of furniture and refrigerated display cabinets

02/2018
- 03/2020

CEO 3D MECA - Entrepreneurship

3D MECA, 69

Business Creation: Mechanical Design Engineering Firm
Prospecting, technical proposal writing
Product design and development, assembly, on-site installation
Projects: Metrological test bench - Electric tricycle, Smartwatch case

01/2017
- 01/2018

Mechanical Design Engineer - Rotating machines

LTDS - Ecole Centrale de Lyon, 69

- Design and Development of 2 Mechanical Vibro-Acoustic Test Benches for Rotating Machines and Power Transmissions
- Project management: planning, milestone and deliverable definition, task management, cost and timeline monitoring
- Budget management for both benches: budget < 50k€/bench
Design, fabrication, installation of the 2 benches, including 1 for VIBRATEC company

04/2014
- 05/2016

Mechanical Design Engineer - High-power lasers

LULI - École Polytechnique - CNRS, 91

Design and development of mechanical and opto-mechanical equipment for intense lasers:
• Responsible for the development of opto-mechanical equipment and instruments for the ELFIE and LULI2000 lasers (greater than 100 TW, TW: terawatt)
• Analyze and translate specifications or technical requirements
Integrate and coordinate, technically, related specialties in vacuum mechanics
Preliminary design, study, design, prototyping, development, manufacturing launch, supplier follow-up, testing, assembly of mechanical assemblies

09/2011
- 03/2013

Mechanical Engineer - High Voltage Circuit Breakers/GIS

SIEMENS T&D, 38

Technical Lead for mechanical orders (actuators) of circuit breakers, disconnectors, and MALT disconnectors for 245/420 kV GIS