LUÍS ANDRÉ ROQUE FORTES

+351 916832950 | luis.roque.fortes@gmail.com | linkedin.com/in/luis-roque-fortes | github.com/0xfortes

Process Engineer with over 6 years of experience in process optimization, skilled in Project Management and Data Analysis.

In the last two years, focused on improving efficiency in continuous combustion industries with hydrogen injection systems. Strong background in leveraging data-driven insights to enhance operational efficiency and optimize processes. Demonstrated success in managing global projects and driving strategic decisions through data analysis. Excellent relationship-building, negotiation skills and teamwork contributing to successful project outcomes.

PROFESSIONAL EXPERIENCE

UTIS - ULTIMATE TECHNOLOGY TO INDUSTRIAL SAVINGS, PORTUGAL

PROJECT MANAGER

AUG 2023 - PRESENT

- Oversee the pre-installation phase of hydrogen injection systems at client's industrial plants, ensuring the specified timelines.
- Coordinate with maintenance, R&D departments, and clients to determine specifications for water pre-treatment systems, communication, and energy integration, ensuring alignment with project requirements and schedules.
- Conduct process training on-site, gather operational data, perform in-depth analyses, and present actionable insights to clients, delivering plans to optimize and enhance processes for increased efficiency.
- Manage projects worldwide (EU, NA, LATAM, ASIA), travelling and gaining extensive global experience.

PROCESS ENGINEER & DATA ANALYST

DEC 2022 - PRESENT

- Apply data-driven insights to optimize processes and drive efficiency improvements across cement, steel, and biomass power plants, leveraging hydrogen injection.
- Collect, manipulate, and analyze client data (Excel, PowerQuery, Python) to identify process inefficiencies, bottlenecks, and areas for improvement.
- Collaborate with teammates to discuss and implement process improvements and ensure successful action plans.
- Conduct root cause analysis to address process issues and drive continuous improvement initiatives.
- Build data visualization tools and reports to communicate key indicators and project progress.

BIOVEGETAL & IBEROL - BIOFUELS AND RENEWABLE ENERGY, PORTUGAL
PROCESS ENGINEER
AUG 2018 - DEC 2022

- Process control and optimization of a biodiesel production plant including methanol and glycerine recovery processes.
- Optimization and control of a refinery for used cooked oils (uco's).
- Process control and optimization of a vegetable oil degumming and neutralization plant
- Experienced with industrial equipment such as pumps, heat exchangers, centrifugal separators, valves, vacuum systems, distillation columns.
- Controlled industrial wastewater treatment processes and ensure that parameters are in compliance.

RICARDO PICO SOCIEDADE DE TRANSPORTES, PORTUGAL
LOGISTICS MANAGER
APR 2017 - AUG 2018

- Planned and managed international road traffic across Portugal, Spain, France and Germany.
- Implemented cost reduction strategies.
- Responsible for ensuring the required standards are in compliance for external audits.

FIDELIDADE SEGUROS S.A, PORTUGAL
MULTICARE CUSTOMER SERVICE AND SALES
FEB 2016 - MAR 2017

- Reached €5 million in sales through strategic cross-selling of Multicare and Fidelidade products.
- Submitted requests to the proper department to prevent re-occurring issues and recommend improvements in the process and procedures.
- Responded to customer inquiries requests; resolved issues efficiently and professionally.
- Developed personal organization and multitasking skills in a fast-paced environment.

TYCO ELECTRONICS CONNECTIVITY, PORTUGAL
PRODUCTION OPERATOR - SUMMER INTERN
JUN 2015 - SEP 2015

- Prefabrication and quality control of electromechanical relays, using metrology practices and control methods like checklists, control letters, FMEA mode and manufacturing instructions.
- Managed stock and production flow using the Kanban method

EDUCATION

PROFESSIONAL CERTIFICATE IBM DATA SCIENCE - COURSERA
AUG 2023

- Python Programming: Including libraries such as Pandas, Numpy, and Matplotlib.
- Data Analysis and Visualization: Analyzed data and created visualizations using tools like Matplotlib, Seaborn, and Folium.
- SQL and Databases: Competent in SQL for querying databases and managing data.
- Machine Learning: Understanding of machine learning concepts and practical experience with algorithms using Scikit-Learn.
- Data Science Methodology: Data science methodologies and best practices for approaching and solving data problems.
- Hands-on Projects: Predicting spaceX Falcon 9 First Stage Landing Success

ENGINEERING PROJECT MANAGMENT - SPECIALIZATION COURSE
INSTITUTO SUPERIOR TÉCNICO, PORTUGAL
MAY 2020 - JUN 2020

- Engineering Project Management (PMBOK & Agile Methodology)

MSC BIOLOGICAL ENGINEERING
UNIVERSITY OF ALGARVE - FACULTY OF SCIENCE AND TECHNOLOGY, PORTUGAL
SEP 2008 - DEC 2016

UNIVERSITY OF CHEMISTRY AND TECHNOLOGY, PRAGUE
FEV 2014 - JUN 2014

- Developed a robust heterotrophic cultivation process utilizing raw dairy industry materials to produce high-value products, such as DHA Omega-3, from marine algae.

SKILLS

- **Languages:** Portuguese (native), English (advanced), Spanish (intermedium).
- **Software Tools:** MS PowerBI, JIRA, MS Project, SuperPro Designer, SPSS, PowerQuery.
- **Coding Skills:** HTML/CSS, JavaScript, Python, SQL
- **Frameworks:** React, NodeJS, Django, ExpressJS
- **Developer Tools:** Git, VSCode
- **Libraries**: Pandas, NumPy, Matplotlib, Seaborn, Folium, Scikit-learn, Plotly
- **Technical Skills:** Bioprocess Engineering, Refining and Separation Processes, Chemical Process Optimization, Industrial Equipments (Chemical Reactors; Westfalia Centrifugal Separators; Deodorizing Systems; Heat Exchangers; Vacuum Systems; Distillation Columns), Process Dynamics & Control, Downstream Processes, SCADA Systems.
- **Project Management:** PMBOK, Agile Methodology.

COMPLEMENTARY COURSES

- Sustainability (ESG): Strategy and Applications - Ordem dos Engenheiros
- HarvardX CS50 Introduction to Computer Science - edX
- Microsoft PowerBI Desktop - Ordem dos Engenheiros.
- Python for Finance: Investment Fundamentals & Data Analytics - Udemy.
- Introduction to Blockchain Technologies - INSEAD.
- Transacting on the Blockchain - INSEAD.
- Blockchain and Business: Applications and Implications - INSEAD.
- Assessment methodologies and risk control - Instituto de Soldadura e Qualidade (ISQ).
- Communication and Teamwork - Instituto de Soldadura e Qualidade (ISQ).