

Education

Specialization in Engineering Management Systems

Pontificia Universidad Javeriana, Cali - Colombia

Oct, 2016

B.S. in Mechanical Engineering

Universidad del Valle, Cali - Colombia

Nov, 2012

Certifications

Front-End Web Development. SDCCE. San Diego, CA, USA

Jun, 2023

Python for Data Science. SDCCE. San Diego, CA, USA

Nov, 2022

Programming databases with Python. SDCCE. San Diego, CA, USA

Aug, 2022

Programming with Python. SDCCE. San Diego, CA, USA

Jan, 2022

**SDCCE: San Diego College Continuing Education*

Languages

- English. Proficient. IELTS 6.0
- Spanish. Native

Computer Skills

- Program Languages: *Python, HTML, CSS, JavaScript.*
- Others: *Jupyter Notebook, Github.*

Projects

Ultra-marathon running – Exploratory Data Analysis

2024

Personal Project

[\(learn more\)](#)

- Utilized Pandas library to read, subset and make exploratory data analysis of 7.4 million records and 13 criteria.
- Performed data cleaning to filter race distance, race country; rename columns, discard columns, discard NA data, check duplicated data,
- Visualized data by using matplotlib and seaborn through histograms, bar charts, and violin plot, regression line, and scatter plot.
- Calculated average speed sorted by gender, and distance.

- Found out the best and worst age groups in 50mi race, and the season which athletes are slower.

Roller Coasters – Exploratory Data Analysis

2024

Personal Project

[\(learn more\)](#)

- Utilized Pandas library to read, subset, and make exploratory data analysis over a database made up of 1087 records and 56 features.
- Performed data cleaning to discard duplicated roller coasters and not key features in this analysis, in this way database resulting was made up of 990 rows and 13 columns.
- Visualized data by using matplotlib and seaborn through histogram, bar chart, Kernel density estimation (KDE), scatter chart, and correlation heat map.
- Found out which were the top 10 fastest roller coasters around the world by using Pandas and displaying through bar chart with seaborn.

Heart Failure Prediction – Exploratory Data Analysis

2024

Personal Project

[\(learn more\)](#)

- Utilized Pandas library to read, subset and make exploratory data analysis of 5000 patients records who suffered of heart failure, 13 clinical features were taken into account.
- Visualized data by using matplotlib and seaborn through histograms, bar charts, and boxplot.

Consultoria Empresarial Jaramillo y Asociados

Jul, 2023

<https://www.cejaramilloyasociados.com/>

- Created landing page using html, CSS, JavaScript.

Work Experience

Maintenance Analyst

Mar 2020

Tecnoquimicas, Jamundi – Colombia

Jul 2019

- Monitored utilities consumption (gas, electricity, water) through data analysis.
- Calculated the annual projections of electricity consumption for production and HVAC equipment.
- Supervised and guaranteed the maintenance and operation of HVAC equipment.

Project Coordinator

Jul, 2019

Unilever, Palmira – Colombia

Apr, 2019

- Established maintenance strategy under the TPM philosophy pillars – autonomous and planned maintenance – by identifying the critical spare parts of the production equipment and their priority preventive maintenance activities.

Maintenance Planner

Kimberly Clark, Puerto Tejada – Colombia

- Planned preventive and corrective activities for the scheduled maintenance stops: elaboration and monitoring of work orders, and acquisition of services and spare parts from suppliers using SAP – PM module.
- Monitored and managed the budget of Facilities Department.

Feb, 2019

Feb, 2018

- Acquired and stocked critical spare parts for production equipment according to the company's policies for purchasing materials using SAP-ARIBA. May, 2017
- Guaranteed the availability of materials and staff according to the company's policies for purchasing services and materials. Aug, 2016
- Established and registered in SAP-PM module, the maintenance strategy for production equipment: activities of preventive and corrective maintenance, maintenance frequencies, and critical spare parts.
- Monitored the fulfillment of scheduled activities during project development: change of the dryer for the tissue machine.
- Supervised the development of the projects executed by contractors: construction of building for robotic bag palletizer.

Engineering Assistant

Jun, 2016

Kimberly Clark, Puerto Tejada – Colombia

Jul, 2015

- Planned preventive and corrective activities for the scheduled maintenance stops: elaboration and tracking of work order, and acquisition of services and spare parts from suppliers using SAP – PM module, considering the maintenance budget.

Maintenance Analyst

Nov, 2012

Carvajal Empaques, Ginebra – Colombia

- Set a model to implement TPM pillars, particularly planned and autonomous maintenance, using ORACLE maintenance module.

Conferences Attended

Women in Data Science. Stanford University. Stanford, CA, USA. Mar, 2023

Community Service

Volunteer

Mar, 2022

The Preuss School, San Diego, CA. USA.

Oct, 2021

- Helped middle school students in Math, Science, and Spanish classes.

References

William Rodriguez

Engineering Manager

Tecnoquimicas

Jamundi – Colombia

wrodriguez@tqgrupo.com

Edwin Alvear

Program Specialist, Lean Energy

Kimberly Clark

Puerto Tejada – Colombia

edwin.a.alvear@kcc.com

Carlos Herrera Ph.D.

Professor

Mechanical Engineering School

Universidad del Valle

Cali – Colombia

carlos.herrera@correounivalle.edu.co

Albio Gutierrez Ph.D.

Professor

Mechanical Engineering School

Universidad del Valle

Cali – Colombia

albio.gutierrez@correounivalle.edu.co