

Maycon Meier

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SUMMARY

Mechanical Engineer and Data Analyst with expertise in Finite Element Analysis, computational modeling, and data science. Proficient in C++, Python, SQL, and Power BI, with five years of experience in data visualization, trend analysis, and deep learning. Strong track record of applying data analytics to solve complex engineering and supply chain challenges. Experienced in leading projects, managing large teams, and collaborating in cross-functional environments. Fluent in English, Portuguese, and Spanish, with U.S. work authorization (green card holder).

SKILLS

- C++, Python, SQL.
- Git, Google Cloud, Inkscape, Jenkins, Github Actions.
- Matplotlib, Tableau, Power BI, MS Excel, ETL.
- FEA, Geospatial Data Analysis, Trend Analysis, Large Scale Data Analysis, Deep Learning, Forecasting.
- Strong Communication, Cross-Functional Team Management, Risk Assessment, Strategic Planning, and Responsible AI.
- English, Portuguese, Spanish.

EXPERIENCE

Postdoctoral Researcher

July 2024 - Present

Arizona State University

- Computational modeling of hydrogen-based direct reduction of Iron leveraging Finite Element Analysis (FEA) using C++.
- Developing innovative computational methods for natural experiments accounting for geospatial and mechanical response.
- Applying deep learning to uncover system dynamics and develop industrial scaling processes.

Software Development Research Assistant

March 2020 - June 2024

University of Colorado

- Implemented open-source C++ software for Computer-Aided Engineering Design (CAE) of solid composite propellants. Designed and managed ETL pipelines for continuous integration and development (CI/CD). The software is now operated at several universities and national labs.
- Developed a new mathematical formulation using phase-fields to perform regression simulations, accounting for heat diffusion, and stress strain material response to body forces and thermal expansion.
- Applied machine learning models to warfare gas detection and classification. Applied data analysis to SQL databases using Python.

Financial Advisor

May 2019 - April 2020

XP Inc

- Created investment portfolios for a diverse range of clients, such as farmers, doctors, and corporate directors.
- Performed client prospection by running events with educational seminars and using local agencies to create client prospect lists.
- Converted over 1 million dollars from low-quality investments into XP high-quality products.

Supervisor, Trainee

January 2017 - January 2018

BRF Brasil Foods

- Led a team of over 140 employees in a production line, with a high focus on production efficiency by optimizing an understaffed workforce, reducing stop times, and food safety by enforcing regulatory codes such as HACCP.
- Applied evidence-based methods to reduce Salmonella cross-contamination, resulting in a 15% reduction in contamination.
- Worked as a support staff for internal utilities management, overseeing a large boiler facility, and pre and postproduction water treatment. Conducted a case study on energy control and utilization.

EDUCATION

Doctor of Engineering

May 2024

University of Colorado

Master of Science

April 2019

Polytechnic Institute of Braganca

Bachelor of Engineering

December 2017

Federal University of Technology at Parana

CERTIFICATES

Google Data Analytics Professional Certificate.

Harvard CS50 Introduction to Artificial Intelligence with Python.

SQL, .NET, and Cybersecurity professional courses.

ISO 9000 Auditor Certificate.