ALI LARA

alilarag@mail.com • (614) 440-6494 • aliglara @ Linkedin • Austin, TX

SUMMARY

Accomplished Chemical Engineer with a robust background in operations management and research. Expert in process modeling, statistical modeling, and machine learning, leveraging tools such as Matlab, Hysys, and Python. Proven leader in optimizing workflows and enhancing productivity through data-driven decision-making. Bilingual in English and Spanish, with a strong commitment to continuous learning, diversity, and inclusivity. Demonstrates adaptability and conflict resolution skills, fostering a harmonious and productive work environment

SKILLS

- Process engineering: Statistical modeling, Mathematical modeling, Matlab, Hysys
- Machine learning: Python, Pandas, Keras, Scikit-Learn, TensorFlow, time-series datasets.
- Management skills: Team leadership, strategic planning, performance monitoring
- Bilingual in English and Spanish

EXPERIENCE

Amazon Central Operations (Austin, TX) **Mar 2024 - present**

Logistics Coordinator

- **Labor Planning and Tool Development** Developed strategic labor planning models and partnered with product teams to create and manage tools for labor and scheduling resources across a network of over 200 warehouses in the USA and Canada. Improved resource allocation accuracy by 20%, enhancing operational efficiency.
- **Analytics and Optimization** Built advanced analytics and data pipelines, enabling optimization and predictive science. Achieved a 15% reduction in labor costs through data-driven insights.
- **Dispatch Analysis Tool** Implemented a Python/Flask tool for real-time dispatch analysis, capable of assessing warehouse operations in less than 2 minutes and overall situational analysis in under 5 minutes. The tool, based on logistics, safety, and financial metrics, ensured timely parcel delivery and effective route management, resulting in a 25% decrease in delayed deliveries.
- **Customer Service** Provided daily customer service to over 200 operations managers in the USA and Canada, ensuring operations were performed timely, safely, and in accordance with Amazon standards. Maintained a 95% satisfaction rate among operations managers.
- **Reporting and Decision Support** Designed and implemented comprehensive reporting solutions that enhanced stakeholder decision-making. Reduced labor order turnaround times by 30% and efficiently addressed labor scheduling escalations, contributing to a 10% increase in overall productivity.

Amazon Logistics (Austin, TX) **Nov 2020 - Mar 2024**

Roles: Associate Area Manager (Mar 2023 - Mar 2024), Yard Marshal (Dec 2021 - Mar 2023), FC Associate (Nov 2020 - Dec 2021)

- **Rapid Career Advancement**: Demonstrated exceptional performance and leadership, progressing quickly through increasingly responsible roles within Amazon's logistics operations.
- **Operational Efficiency and Team Leadership**:
- Led diverse teams (up to 75 members) in high-pressure environments, processing up to 100,000 packages daily. Managed all aspects of inbound workflow, loading/unloading systems, and yard management.
- Enhanced operational efficiency and productivity through strategic planning and resource allocation, resulting in significant improvements in processing rates and safety standards.
- **Data-Driven Process Improvements**:
- Developed and implemented Python-based data analysis tools, automating key operational tasks and supporting data-driven decision-making.
- Created and utilized predictive models and Excel-based tracking tools to optimize package distribution and reduce process defects by 75%.
- Implemented a random forest model for package distribution, reducing ADTA-related errors by 20% and non-productive time by 25%.
- **Training and Development**:

- Coached and mentored associates on performance standards, safety protocols, and operational best practices, contributing to a culture of continuous improvement and learning

Chemical Engineer, MCL Control (Venezuela) **May 2012 - Sep 2019**

- Engineering support for creating mathematical models and simulating gas/oil processes using commercial process simulators
- Shaped machine learning algorithms to develop predictive models and optimize the performance of advanced control algorithms for gas/oil processes
- Assisted researchers team in engineering a standard workflow for implementing non-parametric statistical models in oil/gas processes
- Engineered neural network models in Python/Tensorflow to estimate physical parameters required by process simulations to improve the application performance
- Mentored 10+ junior engineers over one year on using XGBoost and random forest models to optimize the feature selection for machine learning projects
- Gathered information, identified analytical requirements, and developed data-driven based models to translate complex business needs into actionable analytic projects

Lecturer, Universidad Central of Venezuela, Venezuela **Mar 2005 - Nov 2020**

- Researched chemical reaction engineering, mathematical modeling, simulation and optimization, process synthesis and design using machine learning techniques for industrial process evaluation
- Lectured in several chemical engineering areas, including thermodynamics, chemical reactor design, numerical methods, industrial process simulation, and statistical modeling
- Proposed a problem-solved learning experience in different subjects following the ABET guidance.
- Coached 200+ chemical engineering undergraduates with regards to academic pathways and toward degree completion and established and provided career counseling for a network of cooperatives, internships, and externships to foster academic to-industry pipeline

PROJECTS

- Developed Python-based automation tools tailored for logistics processes, enhancing management of production performance metrics. Conducted in-depth analysis to identify and resolve bottlenecks and faults, leading to optimized operational standards and workflow efficiency in logistics operations - 2023
- Design of an industrial plant for solar hydrogen production by water splitting - 2020
- Led a research project on sustainable energy solutions using concentrated solar thermal energy to produce hydrogen.
- Compared different hydrogen production technologies, overcoming data limitations, and demonstrating knowledge of the latest developments in the field.
- Used mathematical modeling and simulation to optimize the plant's electric power production, resulting in the selection of alkaline electrolysis as the most efficient technology and contributing to its commercialization.
- Develop a semi-automatic tool for HAZOP nodes detection from industrial process P&IDs - 2021
- An assistive tool to perform HAZOP studies based on autoregressive models and machine learning techniques in compliance with design specifications - 2020
- Prediction of turbo-compressors performance degradation using deep learning techniques - 2019

EDUCATION

Universidad Central of Venezuela, M.Sc. Chemical Engineering - 2008

Universidad Central of Venezuela, B.Sc. Chemical Engineering - 1998