Eder Arley León Gómez

Data scientist

I am an electrical engineer with a master's degree in engineering, specializing in humanistic, mathematical, statistical, and scientific domains. My expertise lies in data science, encompassing three primary areas: (1) Data processing and analysis: I'm proficient in utilizing classic ***Machine Learning*** algorithms for supervised and unsupervised learning tasks using Python; (2) Deep Learning model development: I have experience in building advanced Deep Learning models for applications such as ***Natural Language Processing (NPL)***, ***Image Processing***, and ***Video Processing***; (3) Implementation of Artificial Intelligence: I possess the skills to implement Artificial Intelligence models in embedded systems. My proficiency in mathematics allows me to design and develop these applications effectively. Furthermore, I am currently pursuing advanced postgraduate studies to enhance my knowledge and skills in these areas.

Academic Background

2012-2015 **Electrical Engineer**, *National University of Colombia*.
Thesis: *"Impacts of squirrel cage induction generators in a power flow studies"*.

2016-2019 **Master of Engineering - Electrical Engineering**, *National University of Colombia*.
Thesis: *"A framework for online prediction using kernel adaptive filtering"*.
Distinction: **Meritorious** for its rigorous research and development of well-founded and consistent research.

2020-Today **Doctorate in Engineering - Automatic**, *National University of Colombia*.
Thesis: **Line of research:** Data science.
"Non-stationary time-series forecasting using machine learning for sustainable energy planning"
Bicentennial Doctoral Excellence Scholarship Program, Minciencias, Colombia

Courses and Certifications

Now **Machine Learning Engineering**, *Platzi*.

2022 **Microsoft Devops Foundataion**, *Intelligent trainig*.

2022 **AWS Cloud Practitioner**, *Platzi*.

2021-2022 **Getting started with AI on Jetson Nano, Getting Started with DeepStream for Video Analytics on Jetson Nano, Building Video AI Applications at the Edge on Jetson Nano**, *Nvidia*.

2021 **Time series**, *Kaggle*.

2021 **Prototipos 10X**, *Sigularity University Colombia*.

2020 **Machine Learning Fundamentals, Image Processing, Big Data, Time series, PySpark**, *DataCamp*.

Work experience

6/4/2020-Today **Data Science Specialist**, ARUS-Group SURA.
Features:

- In addition to working as a data scientist, I provide guidance to the marketing team in generating 10X prototypes based on technical feasibility and product quotations with clients.
- Object detection and tracking: I develop and implement models for object tracking, enabling real-time alerts and offline processing schemes for statistical visualization.
- Forecasting: I have created a time series forecasting framework that applies unsupervised clustering techniques to predict wage growth for individuals.
- Digitization and information extraction from documents: I design transformation schemes and field extraction methods for descriptive analysis in digital transformation processes.

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6/4/2020- **Data Science**, ARUS-Group SURA.
1/5/2021 Features:

- I develop analytical programs and machine learning systems, using both *Machine learning* and *Deep learning* algorithms, as well as advanced statistical methods to prepare data for use in prescriptive and predictive models. This allows for innovation and the creation of new products and services within the company.

6/11/2019- **Data Analyst**, STRADATA.
4/4/2020 Features:

- Created a comprehensive framework for extracting valuable information from individuals within the Wikidata database.
- Conducted thorough text analysis utilizing advanced Text Mining techniques and developed efficient data mining models using Knime.
- Designed and implemented Machine Learning algorithms specifically tailored for processing documentary images, enabling accurate and efficient analysis.

26/10/2018- **Data Science**, National University of Colombia, Proyect: *"Characterization of agricultural crops through remote sensing strategies and image processing techniques"*.
12/3/2019

7/2/2018- **Data Science**, National University of Colombia, Proyect: *"Development of a condition monitoring and fault diagnosis system in hydroelectric power generation systems using a network of high resolution wireless data sensors"*.
21/6/2018

Skills

Basic Knime and GitHub
Intermediate Git, PyTorch, Linux, Docker, AWS, TensorFlow, Scikit-Learn and Jetson-Nano (Nvidia)
Advanced Python and LaTeX

Publications

2019 **International Conference on Acoustics, Speech, and Signal Processing**, IEEE, Brighton (Uk).
Article: *"Time series prediction for kernel-based adaptative filters using variable bandwidth, adaptative learning-rate, and dimensionality reduction"*.

2019 **Pattern Recognition Letters**, El Sevier.
Article: *"A time-series prediction framework using sequential learning algorithms and dimensionality reduction within a sparsification approach"*.

Languages

English Intermediate (Today: Education First English live) *Reading: good. Conversation: regular. Writing: regular.*

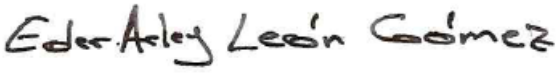
References

Labor Arnold Perez Contreras. Electrical engineer. Operational information analyst. Telephone: 315-2350082
Academic Sergio Garcia Vega. Phd in Engineering. Data scientist. Telephone: (44) 7835-619754
Familiar Joban Arley Parra Gómez. Civil engineer. Telephone: 316-7576563

Statement

I declare that all the information mentioned is true and take full responsibility for its accuracy.

Thank you very much for considering my curriculum vitae.



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