JOSÉ ANTONIO SIGÜENZA

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Summary

Reliable research assistant pursuing a degree in Chemical engineering. Detail-oriented and adept at collecting, analyzing, and synthesizing data from various sources. Successful in contributing to peer-reviewed articles and publications exploring engineering and computation. Ambitious to pursuit the application of programming on research and engineering fields.

Skills

- Python, MySQL, JavaScript, and Julia expertise.
- Open source development.
- Deep Learning experience.
- Data structures management
- Agile development methodologies
- Testing and debugging expertise.
- STEM skills.
- Interdisciplinary troubleshooting.

Experience

Intern Student | Google Summer of Code - online | 06/2021 - 09/2022

- Contributed to DeepChem under Open Chemistry as an umbrella organization.
- Wrote a Deep Learning algorithm known as Normalizing Flows, with its layers, using Pytorch as the backend.
- Developed suitable tests and documentation in agreement with the organization's API.
- Wrote a tutorial on how to use this model and its applicability in drug discovery.

Research Assistant | ESPOL - Guayaquil, Ecuador | 10/2021 - 02/2022

- Application of exploratory analysis, surrogate models, and optimization algorithms using Python.
- Reviewed, automatized, and generated data based on the applied simulation using ASPEN Plus.
- Execute qualitative and quantitative analysis on a wide range of data
- Advanced research by organizing data, generating spreadsheets, and drafting reports.

Research Assistant | ESPOL - Guayaquil, Ecuador | 06/2021 - 09/2021

- Reviewed literature to remain current with new procedures.
- Conducted experiments and maintained detailed records of experiments.
- Elaborate tables, graphs, sheets, and reports summarizing research results.
- Set up and operated various scientific apparatus.
- Organized and maintained records, inventory, and materials.

Volunteer | ESPOL - Guayaquil, Ecuador | 06/2021 - 09/2021

- Generate data for a community project based on measuring the noise level in the local area of Guayaquil.
- Elaborate on graphs and analyze the data using Python and reported findings.

Intern | Becitt S.A - Durán, Ecuador | 02/2020 - 05/2020

- Demonstrated enthusiasm and strong communication skill, remaining open to learning new things every day.
- Assisted others to complete tasks on time.
- Developed a Python algorithm for the inventory department to speed up the process.
- Used MySQL to establish relational databases within the company's products.

Education and Training

ESPOL - Guayaquil, Ecuador | Expected in 08/2023
Bachelor in Science: Chemical Engineering

- TAWS member (programming club) implementing a Question-Answer model using BERT and Django as a framework.
- Introduction to Data Science as an extra subject.
- Online course on Data Cleaning and Data Science.
- Online course on Machine and Deep Learning.
- Personal and Open Source projects using JavaScript, Python, and Julia programming languages.

Languages

- Spanish (Native)
- English (Advanced)
- French (Basic)
- Portuguese (Intermediate)

Socials

- Github: @JoseAntonioSiguenza
- Twitter: @SiguenzaPolo