JOSÉ ANTONIO SIGÜENZA

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Summary

Determined 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.

Skills

- Python, MySQL, JavaScript, and Julia expertise
- Open source prowess
- 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

- Contribute 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 using this model and its applicability in drug discovery.

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

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

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

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

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

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

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

- Organized the difussion team to promote the Women in Data Science (WiDS) event.
- Participated in the staff committee on the day of the program
- Planned the meals and brunch for all the assistants, including the staff.

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

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

Education and Training

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

- Accepted as a TAWS member (programming club) implementing a Question-Answer model using BERT and Django as a framework.
- Took Introduction to Data Science as extra credit
- Participated in an online course on Data Cleaning and Data Science.
- Joined an Online course on Machine and Deep Learning.
- Developed personal and Open Source projects using JavaScript, Python, and Julia programming languages.

Languages

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

Socials

- GitHub: @JoseAntonioSiguenza
- Website: https://joseantoniosiguenza.github.io/webpage
- Twitter: @SiguenzaPolo