

Oscar Moreno

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- React | React Router DOM | React Hooks| React Query | Zustand & Redux | Axios | Zod | Next | Typescript React
- NodeJs | Express | GraphQL | Typescript Node | MongoDB | PostgreSQL | JEST | Supertest | Git
- Python | Java | C++ | C | JavaScript | D3.js
- Openpose | OpenCV | Digital Image processing | Tableau
- Human Computer Interaction| Distributed Systems | Frontend | Backend | Full-Stack

Experience_

Research Technician CTI 01/2019 - Current

 Professional with experience in technical research in the academic field, with a significant focus on software development, web development (both backend and frontend), and data analysis in the field of data science. Projects include:

Legislatio

- Developed an interactive data visualization tool that allowed users to analyze legislative voting patterns in Ecuador, measured by participation and feedback from 13 political participants. Used Python to extract 2063 votes from the assembly and D3.js, JavaScript, **React** for developing the web interface.
- The web interface enabled users to intuitively explore legislative voting data and draw their own conclusions.
- Validated the benefits of the tool through testing with political actors, confirming its usefulness for understanding legislative narratives, legislative processes, and forms of citizen participation, encouraging further exploration of these objectives.

Mentorship Navigator: Visual exploration of Academic Lineages

 Developed an interactive data visualization tool that allowed users to explore academic lineages. Using Python to obtain 256769 authors from academic sources, I integrated the information into the tool. Implemented the user interface using JavaScript with D3.js to generate dynamic visualizations.

Bibliometric Analysis in Scientific Conferences

• Achieved bibliometric and topic analysis of the VINCI and WorldCIST conferences using Python and external libraries such as OpenAlex, AnyStyle, Python NLTK, and Cytoscape, as well as Mallet, to efficiently collect, process, and analyze academic data. Integrated multiple sources and optimized metadata extraction, identifying key trends and relationships in research on communication and visual interaction, as well as in the field of information systems and technologies. This study covered a set of 364 papers, providing a solid foundation for bibliometric analysis.

Ecuadorian political landscape

• Developed an interactive visualization tool in D3.js for comparative analysis of the 2021 Ecuadorian presidential election results.

Education_

Bachelor Degree

Escuela Superior Politécnica del Litoral

Guayaquil, Ecuador 02/2013 - 09/2018

Computer Science

Projects

- Legislatio: Developer of Legislatio project, an interface to facilitate the analysis and visualization of political data
- Compression Service: Cloud-based file compression service. Distributed Systems Project (Node.js, Python, RabbitMQ) (2018)
- KALA: Developer in the Kala Fitness App project (Django, Python) (2017)

Mentorship _

• Academic assistant at ESPOL in the subjects: Web Development and Data Structures.