Miguel Isaac Arroyo Velázquez

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EDUCATION

Universidad Autónoma de Yucatán — BSc. in Engineering Physics — 2016 - 2021

- Undergraduate Thesis Project: Statistical and computational tools in Earth Engine satellite imagery for wildfire exploration.
- Relevant coursework: Data Science, Probability and Statistics ,Machine Learning, Statistical Physics and Energy Sources.

WORKING EXPERIENCE

Teaching Assistant, Bedu, Mexico City (Remote) — August 2021 - Present

- Collaborated with the leading teachers to support them with students' questions.
- Assisted on topics related to Data Visualization, Data Processing and Statistics with Python and R.

Data Analyst Intern, Bedu, Mexico City (Remote) — March 2021 - June 2021

- Programmed a Python script to extract online job description features (web scrapping).
- Performed a text analysis with Natural Language Processing tools and techniques to understand and identify technical and soft skills.
- Reported the results to the Product Department to design the courses with the market's current needs.

Teaching Assistant, Universidad Autónoma de Yucatán — January 2020 - January 2021

- Assessed students on advanced math topics to improve their performance.
- Created scientific visualizations of mathematical concepts for the Basic Sciences Department.

RELEVANT PROJECTS AND COLLABORATIONS

Undergraduate Thesis Project: Statistical and computational tools in Earth Engine satellite imagery for wildfire exploration. — March 2021 - December 2021.

- Gathered wildfire record data from different resources and compared them with satellite imagery to understand their historical and environmental behaviour and impact in Yucatan, Mexico.
- Conducted an exploratory data analysis and summarized the research with proper data visualizations to facilitate communication.

Collaboration with CEJUDI (non-profit organization) — May 2022 - Present

- Teamed up with CEJUDI, a non-profit organization dedicated to working for human rights and social justice, in order to create and write a report that will indicate Yucatan's social issues.
- Supported them in the data analysis workflow.

Collaboration with Mexican Visual Artist, Ruanda Nuñez Zapata — May 2022

- Worked alongside Ruanda, processing and visualizing the data from an online survey she ran for her undergraduate thesis.
- Produced appropriate data visualizations according to Ruanda's needs. For example, minimalistic charts for the document and more elaborated designs for the viewers.

Data Visualization Projects — February 2022 - Present

- Designed and explored various visual representations for data and information, such as static and interactive charts, maps and cartograms.
- Incorporated programming languages with illustration software or other data visualization software.

SKILLS

- Programming: Python, R, HTML, CSS, JavaScript, SQL.
- Data Visualization software: Datawrapper, Flourish.
- Software tools: Adobe Illustrator, Procreate, Google Workspace, MS Office.
- Data Science and Analysis: Data Science pipeline (cleansing, wrangling, visualization, modelling, interpretation), Anomaly Detection, Pattern Recognition, A/B Testing (Hypothesis Testing), Git.