Diego Alejandro Hernández Castañeda

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As a Mathematician passionate about programming and data science, I am driven by a commitment to solving complex real-world problems. My experience in diverse research and professional projects has equipped me with expertise in machine learning models, data analysis, and the collaborative skills.

Education

- 2022- PhD Student in Systems and Computer Engineering, Universidad Nacional de Colombia.
- 2016-2021 Mathematician, Universidad Nacional de Colombia, GPA 4.2/5.0, Final Project: New metric for performance evaluation in grid predictive surveillance models.

Selected Projects

- 2019 Epidemiology Modeling, Universidad Nacional de Colombia, Data Analytics and Mathematical Modeling.
 - o Generation of a risk index model for the propagation of African Swine Fever virus in
- 2019 Crime Modeling, Universidad Nacional de Colombia, Data Analytics and Mathematical Modeling.
 - o Implementation of three crime prediction models and optimization of patrolling areas for the Colombian National Police.

Work Experience

- June 2024 Present, Lecturer, Universidad Nacional de Colombia.
 - Lecturer for the Economic Engineering course.
- November **Present**, Rappi, Specialist Data Analyst.
 - 2021 Generation of web scraping models for competitors, financial data analysis, price optimization models for global operation proposals.
- March 2020 October 2021, NUVU, Data Scientist.
 - Analysis, processing, and generation of machine learning models for financial, demographic, and geospatial data.

Technical Skills

Languages Python, SQL

Libraries Pandas, GeoPandas, TensorFlow, scikit-learn

Publications

- Article 2022, John Gualteros; Diego Hernández; Erika Upegui; CO2 monitoring using sentinel-5p and gee: Cundinamarca case study during covid-19, Tecnología, Investigación y Academia (TIA), ISSN: 2344-8288.
- Article 2018, Gabriel Lozano, Diego Hernández, Nadya Chaves, Mauricio Valderrama, José Mojica, Francisco Gómez; Characterization of skin patterns in Pseudoplatystoma Magdaleniatum, IEEE, DOI: 10.23919/SustainIT.2017.8379806.