

Arturo J. Ossorio Arana

Data Scientist

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ABOUT ME

Passionate about harnessing data science solutions to tackle complex, cross-functional problems, mainly related to water resources and freshwater ecosystems. I excel in helping organizations to understand and leverage the full potential of their data. Recognized for excellent communication skills combined with the ability to relate to people from diverse backgrounds. Always open for new challenges, particularly interested in machine learning.

EDUCATION

MSc., Ecohydrology (Part-time)

Universidad Nacional de la Plata (UNLP)
Thesis pending
Expected Graduation Date: 2023

BEng. + MEng, Civil Engineer

Universidad de Buenos Aires (UBA)
Graduated 2018

SKILLS

Python

Pandas, scikit-learn, GeoPandas, NumPy, Request, Matplotlib, Seaborn

Data-related tools

Git, SQL, PostgreSQL

GIS and Remote Sensing

QGIS, Vector & raster data, DEM, Watershed delineation

Maths

Probability, Statistics, Combinatorics, Linear Algebra, Calculus

Ecohydrology & Freshwater Ecosystems

Water balance, Hydrograms, Eutrophication, Nutrient budgeting, Lake management

OTHER ACTIVITIES

Soccer, Fly fishing, Hiking, Skiing, Camping, Reading, Cooking, Playing guitar, Amateur radio

EXPERIENCE

Limnologist | Data Analyst @ EcoAqua

Mar. 2021 - Present | Argentina (Remote)

- Consistently delivered limnological reports of client's water bodies, preventively identifying negative trends in key water quality parameters and evaluating possible solutions
- Revamped reporting process, decreasing total delivery time by 45% while decreasing errors.
- Performed analysis on water data, identifying regional and seasonal differences in key variables as well as potential correlation between lake, watershed and limnological parameters.

Biology Project Manager @ EcoAqua

Feb. 2020 - Feb. 2021 | Buenos Aires, Argentina

- Diagnosed and treated for algae, submersed, floating and shoreline weeds and any other unwanted vegetation and water quality issues.
- Implemented new budgeting process based on limnological and operational factors, increasing revenue by 27%.
- Developed new workflow for solving customer's complaints, improving client retention rate by 30%, ensuring response of every request on time.

Aquatic Specialist @ EcoAqua

Jun. 2017 - Jan. 2020 | Buenos Aires, Argentina

- Managed five 2-people teams guaranteeing all services were completed on schedule. Devised and executed monthly and weekly schedules.
- Maintained 500+ acres of customer's lakes, providing superior quality service, fulfilling of all customer needs leading to 42% complaint reduction.
- Formulated and standardized maintenance routine for vehicles, machinery and tools, decreasing workflow interruptions by 60%.

Graduate Teaching Assistant (Applied Hydraulics) @ UBA

Aug. 2017 - Present | Buenos Aires, Argentina

- Assigned to 100+ students, answering queries and grading assignments. Rated as "Very helpful" or "Excellent" by 96% of students.
- Aided professors in examinations and course administration. Gave several practical lectures, developing new material for grasping difficult concepts.
- Syllabus: Pressurized pipe flow, pump selection, water hammer, open channel flow, weir and culvert design.

PROJECTS/PUBLICATIONS

Test elaboration on Pandas to evaluate candidates for different roles

- Created 50 scenario-based questions on Pandas, designed to test the situational judgement of the candidates. Reviewed and corrected 50+ previous questions made by another expert.

EDA on Argentine lakes and reservoirs dataset

- Obtained Carlson's trophic state index (TSI) for waterbodies in dataset of Argentine lakes and reservoirs. Analyzed differences between natural and man-made waterbodies and the role of latitude and depth in eutrophication.

EDA on Cal Newport's Podcast

- Using Spotify API, obtained data from podcast and analyzed many variables, such as terms occurrence, episode length and weekday of release.