

# Arturo J. Ossorio Arana

## Data Scientist

[arturoa91@gmail.com](mailto:arturoa91@gmail.com) | [ajossorioarana.github.io](https://ajossorioarana.github.io) | [linkedin.com/in/ajossorioarana](https://linkedin.com/in/ajossorioarana) | +54 9 113 636 8323

## 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.

## EXPERIENCE

---

### Chief of Technical Department - EcoAqua

Feb. 2020 - Present | Buenos Aires, Argentina

- + Diagnosed and treated for algae, submersed, floating and shoreline weeds, non-desirable buffer vegetation and any other unwanted vegetation and water quality issues.
- + Implemented new budgeting process based on limnological and operational factors, increasing revenue by 27%.
- + Devised and developed alongside COO new workflow for dealing with customer's complaints, improving client retention rate by 30% and 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. Planned monthly and weekly field and client related work, providing detailed notes and service instructions.
- + In charge of maintaining 500+ acres of customer's lakes, providing superior quality service in the fulfillment 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 (Course "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 and weir and culvert design.

### Bid/Tender Assistant - Buenos Aires City Government

Jun. 2016 - May. 2017 | Buenos Aires, Argentina

- + Cash-flow and finance audit of IBRD-loan WASH project (Arroyo Vega Drainage Tunnel, \$145MM USD).
- + Elaboration of bidding documentation in accordance to IBRD norms and recommendations.

## EDUCATION

---

### Master of Science MSc., Ecohydrology (Part-time)

Universidad Nacional de la Plata (UNLP) - Thesis pending, Expected Graduation Date: 2022

### Master of Engineering - MEng, Civil Engineer

Universidad de Buenos Aires (UBA) - Graduated 2018

## PROJECTS/PUBLICATIONS

---

### 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. Used Python and Seaborn library to analyze and present the results.

### Watershed delineation of Chimehuín river, Patagonia, Argentina

- + Developed map of Chimehuín river basin with lakes and watercourses marked on it. Used public DEM and GRASS QGIS to define slopes, flow direction and watershed. Created as part of dissertation about exotic willow (*Salix fragilis*) invasion of Patagonian rivers.