



Farid Chaaya

Project Engineer

Farid is a Project Engineer at the Water Research Laboratory. He completed a double degree in Civil and Environmental Engineering at UNSW, with a focus towards aspects of water engineering including hydraulics and coastal engineering. As part of his studies, he completed an Honours thesis investigating techniques for forecasting coastal flood and erosion hazards.

Farid has become a proficient physical modeller, developing a sound understanding of complex hydraulic processes through laboratory testing of dam spillways, cruise ship prop-wash and flume modelling. He is adept in a wide range of instrumentation and modelling skills, as well as model design, construction and operation.

Qualifications and affiliations

BE Hons 1 (Civil/Environmental Engineering), UNSW, 2021

Professional history

February 2021-June 2021: Intern, UNSW WRL

July 2021-Current: Project Engineer, UNSW WRL

Expertise

- Physical model design, construction and testing
- Coastal erosion and flooding processes
- Dam hydrology and hydraulics
- Reservoir management strategies
- Cruise ship prop-wash effects

Summary of relevant experience

Physical modelling

2021: Mozambique prop-wash physical modelling

2021: Overseas Passenger Terminal prop-wash physical modelling

2021: Somerset Dam physical modelling

Reservoir management

2021: Artificial destratification for mitigating cold water pollution

Computing skills

GIS: QGIS

Programming: Excel, MATLAB, Python

Engineering software: XBeach, Quick Terrain Modeller, CloudCompare, LabView