



Jonathan Chan

Project Engineer

Jonathan is a Project Engineer at the Water Research Laboratory. He completed his Bachelor of Environmental Engineering and Computer Science at the University of New South Wales in 2021. As part of his studies, his Honours Thesis investigated the variability of shoreline behaviour along the east coast of Australia, which contributed to him receiving the DN Foster Award in coastal engineering from Engineers Australia.

Jonathan has extended his understanding of coastal and hydraulic processes through physical model testing of breakwater structures and dam spillways. He also has gained experience with environmental data collection and has applied his computer science background conducting data analysis and visualisation.

Qualifications and affiliations

BE (Environmental Engineering), UNSW, 2021
BSc (Computer Science), UNSW, 2021

Professional history

September 2021-Current: Project Engineer, UNSW WRL
December 2019-February 2020: Intern, UNSW WRL

Expertise

- Coastal structures and processes
- Beach geomorphology and coastal stabilisation
- Environmental data collection
- Physical model design, construction and testing
- Dam hydraulics

Summary of relevant experience

Physical modelling

2020: Opotiki river entrance training walls physical modelling
2021: Mandorah breakwater physical modelling
2021: Overseas Passenger Terminal prop-wash physical modelling
2021: Somerset Dam physical modelling

Environmental data collection and analysis

2020: Big Swamp restoration monitoring
2022: Careel Creek sediment dredging analysis
2022: Tuggerah Lakes mapping of MBO's

Computing skills

GIS: QGIS, ArcGIS
Programming: Excel, Python
Engineering software: XBeach, AutoCAD