# **MEI SHUET KONG (MICHELLE)**

# Marine Biologist | Marine Environmental Consultant | Project Manager

# **SUMMARY**

Marine biologist with 2+ years' experience in coastal ecosystem monitoring, marine spatial analysis, and data-driven conservation strategy. Proven success managing cross-border research initiatives and translating scientific data into actionable environmental policy.

# **WORK EXPERIENCE**

### Environmental Consultant / Project Manager (Water Resources)

## SGS | Kaohsiung, Taiwan

Apr 2024 - Present

- **Directed marine water quality baseline projects** across 30+ coral reef and aquaculture zones, managing NT\$4M+ in budgets and consistently delivering reports ahead of deadlines.
- Spearheaded the creation of interactive Excel and Power BI dashboards linking marine water quality data with geospatial mapping, replacing manual charting workflows, cutting reporting time by 60% and enhancing pollution insights through dynamic geospatial mapping and filtering tools.
- Benchmarked international coral reef water quality thresholds (Malaysia, Indonesia, Thailand, Australia, America), pinpointed 3 high-risk sites and proposing parameter thresholds to guide national reef conservation policy.
- Led aquaculture zone water quality surveys across Taiwan, flagging 2 high-risk nutrient pollution sites, leading to their inclusion in a national marine water monitoring plan.
- Synthesized international beach water quality standards (USEPA, EU, Hong Kong) and proposed a traffic light alert system, contributing to its adoption for Taiwan's beach water quality monitoring framework.
- Delivered 5+ public outreach and science communication sessions, promoting community understanding of water quality issues and sustainable marine practices.

### Research Assistant (Coral Reef Fish Ecology and Conservation Lab)

## Tunghai University | Taichung, Taiwan

Mar 2023 - Mar 2024

- **Directed 12-month biodiversity monitoring project** across 4 reef sites, coordinating 15+ field trips and managing a team of 6 divers and students.
- Completed 30+ Underwater Visual Census (UVC) dives and documented 150+ fish species via underwater photography for species ID, contributing to a regional fish atlas database.
- Mapped seahorse distribution using QGIS to visualize seahorse abundance and habitat use in Taiwan.
- **Co-authored a peer-reviewed manuscript** by conducting statistical analysis designing publication-quality figures for journal submission.
- **Mentored 4 undergraduate students**, guiding them through project design, field techniques, and data interpretation.

## Graduate Research Assistant (Marine Biodiversity and Phylogenomics Lab)

#### National Taiwan University | Taipei, Taiwan

Sept 2020 - Feb 2023

- **Processed 200+ DNA samples** from seabirds and deep-sea fish using molecular techniques (DNA extraction, PCR, gel electrophoresis, and library prep).
- Analysed genetic structure using bioinformatics tools (ClustalW, RAxML, ipyrad, STRUCTURE, etc.).
- Interpreted gene flow and population dynamics, providing insights into conservation strategies for the Little Tern (*Sternula albifrons*) across 2 East Asia regions.
- **Co-authored a published journal article** on the Little Tern population structure in Taiwan—Taiwan's first scientific study on this protected species. <u>Link to paper</u>

# **SKILLS**

# Technical & Analytical

Ecological data analysis (R) • Spatial visualization (QGIS, Power BI) • Bioinformatics tools

#### Field & Research

UVC surveys (30+ SCUBA dives) • Coral reef fish ID • Population genetics • Water quality

#### Scientific Communication

Scientific writing (1 published paper) • Outreach and education • Data storytelling

#### Project Management & Collaboration

Strategic planning • Stakeholder communication • Multinational team • Cross-functional coordination

## **EDUCATION & ACHIEVEMENT**

## National Taiwan University, Taiwan

Sept 2020 - Feb 2023

- Master of Science in Oceanography (Marine Biology and Fisheries Division)
- GPA: 4.12 / 4.50
- Taiwan Scholarship Award, National Taiwan University (2022)

#### University of Malaysia Terengganu, Malaysia

Sept 2016 - Sept 2019

- Bachelor of Science (Marine Biology)
- GPA: 3.88 / 4.00
- Programme Best Poster Award, University of Malaysia Terengganu (2019)
- Open Water SCUBA Diver, RAID (2017)

# **LANGUAGE**

