

elainezw92@gmail.com



+65 8768 3412



Singapore Citizen



www.github.com/zzeniale



www.linkedin.com/in/elainezw



## EDUCATION

### Data Science Immersive

General Assembly, Singapore  
2019

#### Projects:

- Classifying subreddit posts using a frequency-based NLP classifier.
- Fitting linear regression models on housing data, and identifying features affecting sales price.

### BA Biological Sciences

Oxford University, United Kingdom  
2012 – 2015

### Introduction to Statistical Learning

Stanford Lagunita (Online)  
2019

### Data Scientist with Python Track

DataCamp (Online)  
AI Singapore AI for Industry Programme  
2019

## SKILLS

Python

Machine Learning

Data Visualisation

Statistical Analysis

SQL

Microsoft Access

Excel VBA

ArcGIS

Adobe Photoshop

Adobe Illustrator

Scientific Writing

# Elaine Zhao

## DATA SCIENTIST

## PROFESSIONAL PROFILE

Data scientist with 4.5 years of experience analysing data in environmental science. Undertook self-directed studies learning Python and VBA beyond my job scope to improve analytical skills and work efficiency. Keen interest and strong aptitude in data analysis, visualisations, and workflow automation. Passionate about using data to solve problems.

## EXPERIENCE

### Environmental Consultant

DHI Water & Environment | Singapore | Sep 2015 - Jul 2019

- Monitored the environmental impact of client developments, through carrying out primary data collection and preparing audit reports for clients such as NParks, HDB, and SDC.
- Improved workflow efficiency by ~90% using VBA and Python; automated and streamlined existing manual data management and data analysis techniques.
- Created visualisations of survey data using ArcGIS to enhance presentation of findings in reports.
- Managed geodatabase containing over 20 sub-categories in ArcCatalog, and created new shapefiles to enhance existing database.
- Extracted data from environmental database in Microsoft Access with over 10 tables and data from over 1700 surveys, to analyse coral distributions around Singapore.
- Used APIs and gathered over 10,000 hotel and restaurant locations to analyse tourism patterns for a disaster risk mitigation project.
- Built web-scraper in Python to automatically check for new satellite data.
- Successfully lead over 15 field surveys by obtaining permits, coordinating manpower, and arranging logistics.
- Designed survey methodologies for 2 new habitat surveys.

### Research Intern

NUS Experimental Marine Ecology Laboratory | Mar – Aug 2012

- Assisted with marine fieldwork and laboratory analysis of ongoing research projects.
- Co-authored the research paper “Environment-induced colour changes in the massive corals *Dipsastraea speciosa* and *Diploastrea heliopora*.” with NUS Associate Professor Peter Alan Todd and Professor Chou Loke Ming, published in the journal Nature in Singapore.
- Designed publicity material for the Giant Clam Conservation Project using Adobe Illustrator and Adobe Photoshop.