

YEZHANG LI 李烨璋

CONTACT INFORMATION

Imperial College London
Royal School of Mine

E-mail: yezhang.li22@imperial.ac.uk
Web: www.imperial.ac.uk/people/yezhang.li22

CURRENT RESEARCH ASPIRATION

Benchmark Analysis: To design the benchmark problems based on shallow water equations (SWE) for model verification and validation.
Mesh Adaptation: To build up the finite element (FE) schemes with adaptive mesh refinement for solving time-dependent SWE based problems in ocean modelling.

EDUCATION

Imperial College London

London, UK

- Ph. D. in Computational Geoscience and Engineering Oct. 2023 - Oct. 2027
Supervisor: Prof. [Matthew Piggott](#), Dr. [Stephan Kramer](#)
Thesis proposal: *Benchmark Analysis and Adaptive Mesh Refinement of Thetis Ocean Models for Tsunami Simulation*
Research field: Computational Fluid Dynamics, Ocean Modelling
- M. Sc. in Applied Computational Science and Engineering Oct. 2022 - Oct. 2023
Supervisor: Prof. [Matthew Piggott](#), Dr. [Stephan Kramer](#), Dr. [Parastoo Salah](#)
Dissertation: *The Accuracy-Cost Analysis and Stability of Discretisation Methods on Test Cases via Thetis Ocean Modelling*

University of Liverpool

Liverpool, UK

- B. Sc. in Mathematics (*with First Class Honours*) Oct. 2020 - June 2022
Core modules: Vector Calculus with Applications in Fluid Mechanics, Complex Functions, Theory of Statistical Inference, Numerical Methods for ODEs & PDEs.

Xi'an Jiaotong-Liverpool University (XJTLU)

Suzhou, CHINA

- B. Sc. in Applied Mathematics (*with First Class Honours*) Sept. 2018 - Aug. 2020
Core modules: Analysis 1 & 2, Multivariable Calculus (Science and Engineering), Advanced Linear Algebra, Introduction to Probability and Statistics.

EXPERIENCES

University of Liverpool ◊ Underwater Acoustics Seminar

Liverpool, UK

- Research Intern June 2022 - Aug. 2022
 - ◊ Supervisor: Prof. [Daniel Colquitt](#), Dr. [Stewart Haslinger](#)
 - Designed the numerical models based on Euler and Runge-kutta methods for performing the ray-tracing of ocean acoustics based on Helmholtz equations.
 - Tested and Applied the numerical models to the [different ocean conditions](#).

Astrostatistics Research at XJTLU ◊ Dr. Xiaoying Pang's Team

Suzhou, CHINA

- Research Intern Sept. 2020 - Mar. 2022
 - ◊ Supervisor: Dr. [Xiaoying Pang](#), [Shih-Yun Tang](#)
 - Identified the member candidates of the open clusters in Solar neighborhood from Gaia EDR3 via Self Organizing Map algorithm, [StarGo \(Web page\)](#).
 - Discovered the early-stage tidal structures of Pleiades and NGC 2516 clusters.
- Research Intern June 2020 - Sept. 2020
 - ◊ Supervisor: Dr. [Xiaoying Pang](#), Dr. [Lei Liu](#)
 - Improved the isochrone fitting algorithm for identification of star clusters.
 - Updated the distribution of star clusters on the disk of Milky Way Galaxy.

