

**Dongting Zhai**

Email : [dongting.24@intl.zju.edu.cn](mailto:dongting.24@intl.zju.edu.cn)

Mobil : +86 158 6716 1227

## EDUCATION

**Zhejiang University-University of Edinburgh Institute (ZJE)**

**Sept. 2024 - Present**

- Undergraduate in Biomedical Informatics, Year 2
- cGPA: 3.94/4.30
- Expected Graduation: Jun 2028

## SKILLS AND LANGUAGES

- **Programming & Data Analysis:** Python, R, SQL, Java; basic HTML
- **Languages:** Mandarin Chinese (native), English (IELTS 7.5)

## RELEVANT COURSEWORK

### Year 1 (2024–2025)

- College Chemistry
- Advanced Mathematics
- Integrative Biomedical Sciences
- Introduction to Cellular and Molecular Biology
- Introduction to Biomedical Informatics

### Year 2 (2025–2026)

- Biomedical Genetics
- Integrated Function of Body Systems
- Database and Software Technology
- Genomics and Proteomics
- Applied Data Science

## RESEARCH EXPERIENCES

### **iZJU-China Team, International Genetically Engineered Machine (iGEM) 2025**

#### **Dry Lab / Modeling Team Member | Apr 2025 – Nov 2025**

- Represented iZJU-China at the 2025 iGEM Competition. The team received a Gold Medal and was named 2nd Runner-up in the Undergraduate Grand Prize (top three globally in the undergraduate division), and earned Best Infectious Diseases Project, Special Prize for Best Part Collection, and a nomination for Best Model.
- Responsible for designing a DNA origami platform for the FoCas project using cadnano, optimized and visualized structures in oxView, and carried out a stability assessment in oxDNA.
- Assisted teammates with protection assessment and transmembrane simulation, including modeling hydroxyl radical diffusion, enzyme-mediated degradation effects, and membrane-penetration behavior of the DNA origami delivery system.
- Project wiki page: [Home | IZJU-CHINA - iGEM 2025](#)

### **Wanlu Liu Lab, Zhejiang University–University of Edinburgh Institute (ZJE)**

#### **Undergraduate Research Trainee, Single-Cell Transcriptomics | Jun 2025 – Present**

- Assisted with analysis of liver single-cell RNA-seq data from multiple disease backgrounds, including PBC, HBV, cholangiolithiasis, MASLD, and CASH.
- Performed quality control, clustering, batch correction, cell type annotation, and downstream analysis of fibrosis-related cell populations.
- Aim to examine cell state changes and cell-cell communication among hepatocytes, cholangiocytes, immune cells, and hepatic stellate cells.

**Wanlu Liu Lab, Zhejiang University–University of Edinburgh Institute (ZJE)**

**Undergraduate Research Trainee, Spatial Transcriptomics | Apr 2026 – Present**

- Assisted with analysis of Visium HD spatial transcriptomics data from liver samples with different disease backgrounds.
- Performed data preprocessing, cell type annotation, differential expression analysis, and pseudo-spatial analysis.
- Aim to examine changes in hepatocyte zonation along the PV-CV axis and spatial interactions between hepatocytes and non-parenchymal cells during fibrosis.

**ADDITIONAL INFORMATION**

- Play the Chinese traditional instrument pipa, basic guitar skills
- Enjoy watching musicals and reading novels