# Xudong Wu

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Citizenship: China

### Education

September 2023

University of Edinburgh - Edinburgh, UK

- Present

BSc(honour) in Mathematics and Statistics

Average score:77/100.

September 2021

Dalian University of Technology (Project 985 and 211) - Dalian, China

- June 2023

BSc in Information and Computing Science

Average score: 89/100, Rank: 10/195.

## Research experience

#### June 2024

#### Summer Research at UC, Irvine

Under Prof. Chen Li, I focus on optimizing Texera, a machine learning-based data analysis workflow platform. My work includes enabling Texera to output PDF reports and developing the Storyteller AI. This AI automatically generates workflow data, analyzes results, and produces comprehensive reports based on the workflow content. Additionally, I contribute to enhancing data cleaning and data analysis components to support visualization.

#### March 2024

#### **Project in Applied Statistics**

We completed the estimation of 3D printer materials using the R language. We also evaluated the impact of different prior functions on the results, and after adopting the most reasonable prior function, we obtained estimates of the parameters through the method of importance in Bayesian statistics.

#### December 2022

#### **Project in Mathematical Modeling and Literature Search**

Led a team project in mathematical modeling, demonstrating leadership, communication, and problem-solving skills. Focusing on the predictive ability of population models in different regions, We added new parameters to the model, such as the fertility intentions of women of different age groups, to enhance the model's predictive accuracy.

### **Key Academic Scores**

September 2023

#### **Numerical Ordinary Differential Equations and Applications**

June 2024-(University of

Score: 98/100 - Focused on numerical methods for ODEs, with applications in physics and epidemiology using Python. Emphasised consistency, stability, and convergence

Edinburgh) of methods.

### **Honours Complex Variables**

Score: 85/100 - An advanced honour lecture, covered holomorphic functions, and conformal mappings. Included rigorous study of integration and differentiation of complex functions. And advanced topic behind it.

#### **Financial Mathematics**

Score: 82/100 - Introduced financial markets, derivative instruments, and noarbitrage pricing. Included stochastic analysis, Ito calculus, and the Black-Scholes model.

September 2021

### **Mathematical Modeling and Literature Search**

– June 2023–(Dalian Score: 96/100 - Demonstrated strong capabilities in mathematical problem-solving and research methodologies.

University of Technology)

#### **Complex function theory**

Score: 92/100 - Consistently high performance in complex mathematical theories.

### **Ordinary Differential Equation**

Score: 99/100 - Achieved near-perfect score, showcasing analytical proficiency in differential equations.

#### **Number Theory**

Score: 98/100 - Excelled in understanding and applying complex number theory concepts.

# Honors and scholarships

September 2022 Fi

First-Class Scholarship (Dalian University of Technology)

- June 2023

Elite student (Dalian University of Technology)

Excellent league secretary (Dalian University of Technology) Dual Degree Student Scholarship (University of Edinburgh)

International Study Scholarship (Dalian University of Technology)

September 2021

Second-Class Scholarship (Dalian University of Technology)

– June 2022

Elite student (Dalian University of Technology)

# Technical skills

# **Programming languages**

Proficient in: Python, R

Familiar with: C++, MATLAB

### Software

LaTeX, Git, Microsoft Office Suite

# Languages

English (Fluent), IELTS 7 Mandarin (Native)