Yunfan Leng

l623304@163.com · nuagesir@mail.dlut.edu.cn

Education

Dalian University of Technology, Computer Science and Technology, *Undergraduate Student*

Sep 2022 - Jul 2026

- **Weighted Average Mark**: 85.2/100
- **Key Courses**: Probability and Statistics A (97), Fundamentals of Engineering Mathematics Analysis 1&2 (95&95), Advanced Programming Integrated Training (95), Programming Basis A (94), Big Data Analysis Technology (92), Advanced Programming Language (C++) (92).

Technical Skills

- **Programming Languages**: Python, C++, C, Javascript, LaTeX
- **Frameworks & Libraries**: PyTorch, Pandas, NumPy
- **Systems & Developer Tools**: Linux, Bash Scripting, Git, Docker, MySQL
- **Languages**: IELTS Academic 7.5, CET-6, CET-4

Academic Research

A Dual-Sensitivity Objective Function for Time Series Forecasting

Mar 2025 - Jun 2025

- **Role**: Co-first Author
- **Advisor**: Prof. HengQi, Department of Computer Science, Dalian University of Technology
- **Description**: Designed a novel objective framework (**D-S-LSE**) that integrates **Log-Sum-Exp mechanism** and **Pearson-correlation-based operators** to enhance time series forecasting through improved **numerical precision** and **directional consistency**, establishing the **first unified formulation** of dual sensitivities in objective design, and achieving an average **5.8% MAE reduction** across **8 datasets and 6 models**.
- **Status**: Under Review at Information Sciences.

SunNet: Outlier-Aware Cloud Resource Demand Forecasting

Jun 2025 - Oct 2025

- **Role**: Co-first Author
- **Advisor**: Prof. HengQi, Department of Computer Science, Dalian University of Technology
- **Description**: Proposed **SunNet**, a dual-branch framework for cloud resource demand forecasting that explicitly handles sparse outliers. Designed a **Outlier Detection and Decomposition Module** to separate time series into normal and outlier subsequences, and developed a **Trend-enhanced Fine-tuning Module** integrating learnable trend embeddings with pre-trained TSFM (Sundial) to capture baseline patterns, achieving **SOTA performance** on four real-world cloud resource datasets.
- **Status**: Under Review at ESWA.

Internship Experience

Inspur Group | Data Center, Technical Service — Jul 2025 - Sep 2025

- Developed a forecasting model based on the sequence decomposition methodology from my academic research to predict server load spikes from live operational data. Collaborated with the engineering team to deploy the model, achieving a measurable reduction in system crash frequency and directly improving platform reliability.
- Fulfilled all core responsibilities, including maintaining databases and network honeypots for the Shandong Provincial Department of Transportation's Toll Settlement Center.

Competition Awards

- **Second Prize**, Chinese Mathematics Competition (CMC), Nov 2023
- **First Prize**, Liaoning Province Mathematics Competition for College Students, Nov 2023

Other Activities

- Teaching Assistant for "Microcomputer installation and commissioning ", Spring 2025