# YONG LIU

Phone: (+86) 130-0195-9866  $\diamond$  Email: liuyong21@mails.tsinghua.edu.cn

Homepage: https://wenweithu.github.io/ Google Scholar ◊ GitHub ◊ ORCID

#### **EDUCATION**

Ph.D. in Software Engineering

Aug. 2021 - Present

School of Software, Tsinghua University

Beijing, China

Advisor: Prof. Mingsheng Long

Bachelor in Software Engineering, Tsinghua University

Aug. 2017 - July 2021

School of Software, Tsinghua University

Beijing, China

GPA: 3.63/4.0 Rank: 2/84 CET-4: 610; CET-6: 620

Bachelor in Economics, Tsinghua University (Second Degree)

Aug. 2018 - July 2021

School of Economics and Management, Tsinghua University

Beijing, China

#### RESEARCH INTERESTS

My research interests cover **Time Series Analysis** and **Transfer Learning**. I am currently working on foundation time series models, large time series models, and multi-modal time series models. The pursuit of my research is to implement a deep learning methodology in valuable real-world applications.

### PUBLICATIONS AND PREPRINTS

Timer: Generative Pre-trained Transformers Are Large Time Series Models

ICML 2024

Yong Liu\*, Haoran Zhang\*, Chenyu Li\*, Xiangdong Huang, Jianmin Wang, Mingsheng Long#

Deep Time Series Models: A Comprehensive Survey and Benchmark

arXiv preprint 2024

Yuxuan Wang\*, Haixu Wu\*, Jiaxiang Dong, Yong Liu, Mingsheng Long, Jianmin Wang#

AutoTimes: Autoregressive Time Series Forecasters via Large Language Models arXiv preprint 2024 Yong Liu\*, Guo Qin\*, Xiangdong Huang, Jianmin Wang, Mingsheng Long#

Deep Time Series Models: A Comprehensive Survey and Benchmark

arXiv preprint 2024

Yuxuan Wang\*, Haixu Wu\*, Jiaxiang Dong, Yong Liu, Mingsheng Long, Jianmin Wang#

Koopa: Learning Non-stationary Time Series Dynamics with Koopman Predictors

NeurIPS 2023.

Yong Liu\*, Chenyu Li\*, Jianmin Wang, Mingsheng Long#

ICLR 2023

TimesNet: Temporal 2D-Variation Modeling for General Time Series Analysis Haiwu Wu\*, Tengge Hu\*, Yong Liu\*, Hang Zhou, Jianmin Wang, Mingsheng Long#

Non-stationary Transformers: Exploring the Stationarity in Time Series Forecasting NeurIPS 2022 Yong Liu\*, Haiwu Wu\*, Jianmin Wang, Mingsheng Long#

Ranking and Tuning Pre-trained Models: A New Paradigm for Exploiting Model Hubs JMLR 2022 Kaichao You\*, Yong Liu\*, Ziyang Zhang, Jianmin Wang, Michael I. Jordan, Mingsheng Long#

 $Log ME:\ Practical\ Assessment\ of\ Pre-trained\ Models\ for\ Transfer\ Learning$ 

ICML 2021

Kaichao You\*, Yong Liu\*, Jianmin Wang, Mingsheng Long#

## APPLICATIONS AND PROJECTS

### Algorithm Library

• Time-Series-Library: Deep Models for Time Series Analysis

Committer

• Transfer-Learning-Library: Algorithms for Transfer Learning

Committer

## Deep Models for Time Series

• <i>iTransformer</i> : Foundation Multivariate Time Series Model	Maintainer
• Timer: Datasets, Checkpoints, Code for Developing Large Time Series Model	Maintainer
• Non-stationary Transformers: Transformers for Non-stationary Forecasting	Maintainer
Systems	
$\bullet$ Apache IoTDB - AINode: Native Machine Learning Engine in Time Series Data	abase Designer
• Huawei: Resource Allocation of AIOps	Alg. Instructor
• Ant Group: Green Computing of Data Center	Alg. Developer
SERVICES AND EXPERIENCES	
Academic Services	
• Conference Reviewer, International Conference on Learning Representations	2024
• Conference Reviewer, International Conference on Machine Learning	2022-2024
• Conference Reviewer, International Conference on Machine Learning	2023
• Conference Reviewer, International Conference on Very Large Databases	2023
• Conference Reviewer, Conference on Neural Information Processing Systems	2023-2024
Teaching Experiences	
• Teaching Assistant, Database System	<i>Spring 2024</i>
• Teaching Assistant, Machine Learning	Fall 2023
• Teaching Assistant, Introduction to Artificial Intelligence	Spring 2023
• Teaching Assistant, Deep Learning	Fall 2022
• Teaching Assistant, Introduction to Artificial Intelligence	Spring 2022
• Teaching Assistant, Machine Learning	Fall 2021
• Teaching Assistant, Introduction to Artificial Intelligence	Spring 2021
HONORS AND AWARDS	
• Shenzhen Stock Exchange Scholarship ( <b>Top 1</b> %)	2023
• Outstanding Papers of Beijing ( <b>Top 1</b> %)	2021
• Outstanding Graduates of Beijing ( <b>Top 1</b> %)	2021
$\bullet$ Excellent Graduates of Tsinghua (Top 1%)	2021
$\bullet$ Future Scholar Scholarship, Tsinghua University (Top $1\%)$	2021
• Boeing Scholarship, Tsinghua University ( <b>Top 1</b> %)	2020
$\bullet$ Tang Lixin Scholarship, Tsinghua University (Top 1%)	2020
$\bullet$ Jiang Nanxiang Scholarship, Tsinghua University (Top 1%)	2019
$\bullet$ Huawei Scholarship, Tsinghua University (Top $1\%)$	2018