Tingdi Ren

English: 108(TOEFL), 516(CET-6)
Code: Python, Matlab, R, C++, Mathematica
Mail: tingdiren@gmail.com **Homepage**: adilifer.com

Education

◇ **Central University of Finance and Economics** **2023 –**

- **Major**: B.Eco. Actuarial Science (bachlor-straight-to-doctorate)

◇ **Ningbo University** **2019 – Now**

- **Major**: B.Eco. Financial Engineering *GPA: 3.81/4.0*
- **Rank**: 1/25

Research Experiences

◇ **Reinforced Swin-Convs Transformer for Simultaneous Underwater Sensing Scene Image Enhancement and Super-resolution** *Publication* **Jan 2022 – Sep 2022**

- **Abstract**: A deep network for underwater images enhancement and simultaneous super-resolution is built based on the Swin Transformer model in computer vision, improved by our introduction of convolutions with the redesigned multi-task loss functions. The network achieved the state-of-the-art on mainstream datasets.
- **Deliverables**: The paper is published at IEEE Transactions on Geoscience and Remote Sensing (IF: 8.125) as the first author.

◇ **Patent Infringement Case Prediction Auxiliary System Based on DNN** *Project Manager* **Apr 2021 – present**

- **Abstract**: We establish a deep neural network-based auxiliary system for patent infringement case prediction. Users e.g. junior legal personnel can predicted the compensation amounts (categories) of infringement case. And a analysis system visualizing the risk degree of a certain region and industry is constructed.
- **Deliverables**: The initial result is deployed at project.adilifer.com/Patent, supported by ZJ-Xinmiao Talents Program.

◇ **Private Bank Efficiency Evaluation Based on Two-Stage Network DEA** *Project Manager* **Nov 2019 – Nov 2020**

- **Abstract**: A two-stage network DEA model regarding the deposit as an intermediate product is proposed to evaluate the efficiency of developing private banks. After verifying the rationality of the hypothesis, the empirical studies show the incomplete efficiency of the private banking industry with a "virtual bank".
- **Deliverables**: The conclusion thesis can see adilifer.com/files/research/Bank.pdf, supported by NBU-SRIP.

◇ **Adaptive Application of Asset Bubble Detection under Martingale Pricing** *Preprint* **Oct 2021 – Dec 2021**

- **Abstract**: With the asset bubble defined by strict local martingale and modeling the asset price process via SDE, Bubble Theory is utilized to convert the problem of asset bubble detection into estimating the parameter of SDE. HMM smoothing and conditional filtering are used to the apply to the Chinese A shares.
- **Deliverables**: The preprint version can see adilifer.com/files/research/Asset_Bubble_Dectection.pdf

My homepage showns more research experiences...

Awards

YangMing Legend of the Year **2021**

Social Services

Assistant of Mathematical Statistics (Mao) **2021 Fall**

Assistant of Mathematical Statistics (Sun) **2022 Spring**

Skills Certificate

Securities Qualification Certificate **2019**

Competitions

Contemporary Undergraduate Mathematical Contest in Modeling National First Prize (Captain) **2020**

The 6th China International College Students' *Internet+* Innovation and Entrepreneurship Competition National Gold Award (Rank 3 in Team) **2020**

Mathematical Contest In Modeling / Interdisciplinary Contest In Modeling Meritorious Winner (Captain) **2021**

The 12th Chinese Mathematics Competitions Third Prize in Zhejiang Province **2020**

The ZheJiang 7th College Students' Securities Investment Competitions Third Prize in Zhejiang Province) **2021**