

FEI YANG

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EDUCATION

Beijing Normal University (985 & 211 projects) Sep 2022 – Jun 2025

Master in *Applied Mathematics, School of Mathematical Sciences*

- **GPA:** 3.6/4.0
- **Courses:** Introduction to Fuzzy Sets (94), Information Granulation and Computational Intelligence (95), Integrable Systems and Their Applications (90), etc.

Beijing University of Posts and Telecommunications (211 projects) Sep 2018 – Jun 2022

Bachelor in *Mathematics and Applied Mathematics, School of Science*

- **GPA:** 3.74/4.0 (Top 8.33%)
- **Courses:** Mathematical Models and Experiments (98), Simulation (99), Numerical Analysis (100), Sample Survey (98), Equation of Mathematical Physics (100), etc.

Research Interest: Data Mining, Fuzzy Modeling, Granular Computing, Machine Learning

ACADEMIC PUBLICATIONS

F. Yang, C.Ouyang, F. Yu*(Supervisor), et al. Design Novel FCM-based Forecasting Model for Interval-valued Time Series: From Distance-metric Perspective[C]. *2023 18th International Conference on Intelligent Systems and Knowledge Engineering (ISKE)*, 2023, pp. 220-227. <https://doi.org/10.1109/ISKE60036.2023.10481306>

F.Yang, F.Yu* (Supervisor), et al. Design Trend Fuzzy Granulation-Based Three-Layer Fuzzy Cognitive Map for Long-Term Forecasting of Multivariate Time Series[J]. *IEEE Transactions on Fuzzy Systems*.<https://doi.org/10.1109/TFUZZ.2024.3474476>

F.Yang, C.Ouyang, F.Yu* (Supervisor), et al. The Trend-Fuzzy-Granulation-Based Two-layer Fuzzy Cognitive Map for Long-Term Time Series Forecasting[J]. *Information Sciences*. (With Editor)

F.Yang, F.Yu* (Supervisor), et al. The Interval-Trend Fuzzy Information Granulation Based Group-Hierarchical Fuzzy Cognitive Map for Long-Term Forecasting of Multivariate Interval-Valued Time Series [J]. *Information Sciences*. (With Editor)

F.Yang, F.Yu* (Supervisor), et al. Construct Trend Fuzzy Information Granulation-Based Fuzzy Cognitive Map for Long-Term Forecasting of Interval-Valued Time Series [J]. *Applied Soft Computing*. (Submitted to Journal)

RESEARCH EXPERIENCE

Generalized Darboux transformation and rational solutions of the Boussinesq equation

Graduation Project of Undergraduate

Dec 2021 - Apr 2022

- To investigate the exact solutions of Boussinesq equation (BE) using the Darboux transformation method.
- Developed Darboux and generalized Darboux transformations in operator form for the Boussinesq equation, applied them to obtain solitons and rational solutions in Wronskian determinants form, and presented a physical interpretation through 2-D, 3-D, and Contour diagrams with the flexibility to choose different parameters.
- The Darboux transformation method has been developed for solving two types of Boussinesq equations, resulting in the derivation of exact solutions. These solutions encompass soliton solutions, rogue waves, periodic solitary wave solutions, and rational solutions, all of which are characterized by their simple forms and clear physical interpretations.

WORK EXPERIENCE

Faculty of Arts and Sciences, Beijing Normal University (Zhuhai)

Teaching Assistant & Data Structures and Algorithm Analysis

Sep 2024 – Jan 2025

Faculty of Arts and Sciences, Beijing Normal University (Zhuhai)

Teaching Assistant & Fuzzy Mathematics

Sep 2024 – Jan 2025

College of Education for the Future, Beijing Normal University (Zhuhai)

Teaching Assistant & Basic of Program Design

Feb 2024 – Jun 2024

School of Mathematical Sciences, Beijing Normal University

Teaching Assistant & Linear Algebra

Sep 2023 – Jan 2024

AWARD & HONOR

University-Level First-class Scholarship

Dec 2024

University-Level Second-class Scholarship

Dec 2023

University-Level First-class Freshman Scholarship (Admitted by Postgraduate Recommendation)

Dec 2022

University-Level First-class Scholarship (Top 3%)

Dec 2021

Annual Exemplary Student

Dec 2021

Second Prize for Band C in 2020 National English Competition for College Students

Nov 2021

University-Level Third-class Scholarship

Dec 2019

LANGUAGES & SKILLS

Languages: Mandarin (Native); English (IELTS 6.5)

Computer Skills: C, C++, Matlab, Mathematica, R, SAS, Python, SQL

PERSONAL EVALUATION

Strong Learning Ability: Quickly adapt to new fields and and acquire new skills.

Independent Problem-Solver: Highly focused, perseverant, and efficient in tackling challenges.

Action-Oriented: Propel projects forward with enthusiasm and determination, ensuring efficient execution and timely completion of tasks.