

WANG Chong
Date of Birth: 21/12/2001
Master candidate
Computer Science
Beijing|Nanyang

#### **EDUCATION**

• Beijing Jiaotong University

Computer Science and Technology, Master Degree

 $\bullet \ \ {\bf Technical \ University \ of \ Darmstadt}$ 

Computer Science

• Beijing Jiaotong University

Applied Physics, Bachelor Degree

03/2024-09/2024 Exchange student 09/2018-07/2022

CGPA/Percentage: 84.03

09/2022-07/2025

Graduation Project: A

## EXPERIENCE

# • China Aerospace Science and Industry Corporation Limited

Member of the CASIC-BJTU Joint Laboratory

- The problem of interpolating discrete data into continuous functions

- The problem of Obstacle Avoidance in Aircraft Flight
- Building motion models and deep learning models

#### Personal Projects

## • Modeling Irregular Time Series with Neural Differential Equations

08/2024-01/2025

09/2022-02/2024

Yongding Rd, Beijing

Modeling the potential continuous-time dynamics of discrete-time data using neural differential equations.

- Methods: Latent ODE, Continuous Time Attention Mechanism, Neural SDE

## • Flight Obstacle Avoidance Control Based on Neural Networks

06/2023-09/2023

Adding neural network disturbances to the reference trajectory to avoid obstacles.

- Methods: Deep feedforward network

#### Aircraft trajectory data generation

01/2023-05/2023

 $Integrate\ the\ flight\ dynamics\ equations\ to\ simulate\ the\ reference\ trajectory.$ 

- Methods: Runge-Kutta Method, Euler Method

### Aerodynamic parameter interpolation

09/2022-12/2022

Interpolate and fit aerodynamic parameters for calibration.

- Methods: Chebyshev Polynomial, Legendre Polynomial, Feedforward neural network

## TECHNICAL SKILLS AND INTERESTS

Languages: English: TOEFL 99, German: Entry level

Developer Tools: Visual Studio Code, Python(skillful), Jupyter Notebook, C, Matlab

Frameworks: Tensorflow2.x, Pytorch, Mindspore, Jax

Soft Skills: Latex, Microsoft Family, WPS, ChatGPT, Github Copilot

Areas of Interest: Physics-Informed Machine Learning, Neural Differential Equations, Generative Models

### AWARDS

11/2019
12/2019
12/2020
12/2020
01/2023
10/2023

#### Publication

## International Joint Conference on Neural Networks, 2025 (Accept)

SDEFormer: Neural Stochastic Differential Equations for Continuous-Time Transformers in Irregular Time Series Modeling,  $First\ author$ 

Journal of Polymer Science, 2022 (Published) (National Training Program of Innovation and

Entrepreneurship for Undergraduates)

Ternary-organic photovoltaics with J71 as donor and two compatible nonfullerene acceptors, Second author