Wang Ziming

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Education Background

Bachelor of Mechanical and Electrical Engineering, College of Sino-German Engineering, Tongji University (September 2022 - June 2026)

Main Courses: Advanced Mathematics, Linear Algebra, Probability Theory and Mathematical Statistics, C/C++ Programming, Automatic Control Principles, Electronics and Digital Technology, Mechanical CAD Drafting, Business Economics and Quality Management, etc.

Project Experience

NLP Natural Language Processing

Challenge Competition Based on Terminology Dictionary Intervention (July-August 2024)

Model Establishment: Implemented sequence-to-sequence model-based GRU neural network machine translation with attention mechanism and further enhanced machine translation capability with Transformer model.

Model Improvement: Completed parameter tuning, data cleaning, and integration of terminology dictionaries.

Blog Writing: Authored a CSDN blog post on realizing machine translation with Transformer which received nearly a thousand reads and was selected as one of CSDN's top newcomers (Quality Score 93).

Wide Temperature Range Insulated Power Battery

Project Leader (March-June 2024)

Structural Design and Modeling: Designed a multi-layer composite heat conduction structure and dual-layer bidirectional liquid cooling/liquid heating system providing thermal management solutions for power batteries to achieve long-life operation under a wider temperature range. Part of the modeling was completed using CAD.

Assembly and Recycling Conceptual Design: Proposed assembly plans and offered industrial production ideas along with environmentally friendly, low-cost recycling and maintenance solutions.

BMS Function Design: Provided master-slave BMS (Battery Management System) design concepts and participated in designing multimode temperature control thermal management schemes.

Industry Analysis and Business Plan Writing: Reviewed over ten industry reports, wrote nearly 10,000 words of industry analysis and market outlook reports, and completed a business plan.

Building and Promoting an IP Centered Around Virtual Humans

Chinese International College Students' Innovation Competition CFO (March-June 2024)

Industry Research and Commercial Planning: Conducted analysis on digital human generation products like D-ID, MagicFlint Technologies, Tencent Zhiying, visited Quanshi Culture Media Co., Ltd., understood technological challenges, user needs, market prospects, drafted financing plans, development strategies, business models, and risk assessments, determined the company's equity structure.

Virtual Human Design: Utilized Live2D technology to establish a virtual character named "Tongji Girl," capable of synchronized expressions and movements.

Business Plan and Presentation PPT Production: Participated in writing the business plan and creating the presentation slides for the competition.

Competition Awards

National Runner-up in China Society Of Automotive Engineers Power Battery Technology Innovation Challenge

Bronze Award in School Round of China International College Students' Innovation Competition

Other Experiences

Social Activities: Was responsible for planning the Tongji Sino-German Voice Contest and participated in hosting the booth at the CDHAW German Culture Festival, which attracted thousands of participants.

Mathematical Modeling: Joined the mathematical modeling club and competed in the national mathematical modeling contest, serving as the programmer and paper writer within the team.

Skills and Strengths

Language Skills: Mandarin (Native), English, German

Office Skills: Proficient in using Xmind, Office software, etc.

Programming Languages: Proficient in Python, C/C++, and MATLAB, with basic knowledge of SQL.

Media Skills: Proficient in video editing software such as Jianying.