



# Peidong Wang

LEARNER AND RESEARCHER · ARTIFICIAL INTELLIGENCE

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## Summary

Undergraduate Researcher in the Data Mining group at Northeastern University, supervised by Associate Prof. Shi Feng. Primary research interests encompass Generative Artificial Intelligence, Large Language Model, Multi-modal Large Language Model, Diffusion, and Empathic dialogue, among others. Current academic work focuses on the areas of multi-modal dialog and multi-modal Large Language Model. Co-first author of one paper at a CCF-recommended A conference and second author of one paper at a CCF-recommended B conference. Won two national first prizes and one national third prize in high-level university competitions.

## Education

### Northeastern University

Shenyang, China

B.S. IN ARTIFICIAL INTELLIGENCE

Sep. 2021 - ToDay

- Awarded second and third prizes for academic scholarships.
- Honored as an Outstanding Individual for Academic Excellence.
- Awarded future scholarships.
- Members of the future experimental class.

## Publications

### STICKERCONV: Generating Multimodal Empathetic Responses from Scratch (Received by ACL 2024)

Co-first Author

CONTRIBUTION:

May. 2024

- Designed a new multi-modal large model framework: **PEGS**(**PE**rceive and **GE**nerate **S**tickers), which utilizes multi-modal RAG(Retrieval-Augmented Generation) in multi-modal response generation for the first time.
- Trained PEGS-Ret and PEGS-RAG, they obtain images by retrieval and RAG, respectively.
- Wrote part of the paper

### TIGER: A Unified Generative Model Framework for Multimodal Dialogue Response Generation (Received by LREC-COLING 2024)

Second Author

CONTRIBUTION:

Feb. 2024

- Trained Divter's image generator (DALL-E) as a baseline model
- Carried out evaluation experiments

## Awards

### China College Student Computer Game Competition

National First Prize

CONTRIBUTION:

Aug. 2023

- Design position reward values for several position types inherent in the game, and code a machine gaming program using the min-max gaming strategy.
- Served as an operator in the competition

### The 21st National College Robot Competition ROBOCON 2022 "Create brilliant together" National First Prize (Second Place)

CONTRIBUTION:

Jul. 2022

- Predict enemy robot head ball trajectories using Holt-Winters method and Kalman filtering
- Code trajectory planning for two robots using B-splines and minimum-snap

### The 21st National College Robot Competition ROBOCON 2022 "Machine equestrian competition"

National Third Prize

CONTRIBUTION:

Jul. 2022

- According to the principle of conservation of angular momentum, using a momentum wheel to maintain the balance of a quadrupedal robot according to its axial deflection angle.
- Code for planning end-of-foot trajectories of quadruped robots