

# Youzhe Song

🏠 Homepage | 📍 Shanghai, China | ✉ yanfengz@outlook.com | ☎ +86 180 1923 6930

## Education

- East China Normal University** (Project 985) Sept 2021 – June 2024  
*M.S. in Computer Science and Technology*
  - GPA: 3.77/4.00 (Top 5%); Admitted via recommendation (waiver of entrance exam)
  - Research Focus:** Visual Generalization, Contrastive Learning (Advisor: Feng Wang, Associate Researcher)
- Donghua University** (Project 211) Sept 2017 – June 2021  
*B.S. in Computer Science and Technology*
  - GPA: 4.01/4.30; **Rank: 2/180**
  - Honors:** Outstanding Graduate, University Scholarship
- Purdue University Northwest** Aug 2019 – Aug 2020  
*Exchange Student & Research Assistant, Computer and Information Technology*
  - GPA: 3.90/4.00; Research Assistant under Prof. Keyuan Jiang (Department Chair)
  - Awarded full CSC scholarship; **1st Place**, Notre Dame Data Hackathon

## Publications

- Youzhe Song**, Feng Wang. "CoReFace: Sample-guided Contrastive Regularization for Deep Face Recognition." *Pattern Recognition*, vol. 152, art. 110483, 2024. [🔗](#) [📄](#)
- Youzhe Song**, Feng Wang. "QGFace: Quality-Guided Joint Training For Mixed-Quality Face Recognition." *In Proceedings of the 2024 IEEE International Conference on Automatic Face and Gesture Recognition (FG)*. [🔗](#) [📄](#)

## Research Experience

### CoReFace: Improving Generalization with Contrastive Regularization

- Identified **model brittleness** in open-set recognition as a key challenge to generalization.
- Proposed **CoReFace**, a framework using **contrastive learning** as a regularizer to learn a more discriminative feature space, **increasing the similarity margin for positive/negative pairs by 15%**.
- Achieved state-of-the-art performance by applying self-supervised principles to supervised learning, offering a new path for building more robust recognition models.

### QGFace: Unified Representation Learning for Heterogeneous Data

- Addressed the **critical, real-world issue** of training a single model on heterogeneous-quality data.
- Designed a **unified, single-encoder** with a quality-aware strategy, improving efficiency and scalability.
- Reached state-of-the-art on mixed-quality benchmarks with a practical solution for robust recognition.

## Industry Experience

### Technical Manager June 2024 – Present

Worldwide Educators Conference ([WWEC](#))

- Managed internal and external technical associations for this **10K-participant conference** and developed an automated tool to generate 1000+ custom conference assets, saving an estimated 100+ hours of manual design work.
- Stimulated our team to digitize the storage of data and the pipeline to further support the growth of this project.
- Established the official website with repeated discussions among colleagues from multiple departments. [🔗](#)

### AI Full-Stack Developer Intern May 2023 – Oct 2023

Shanghai KeyoneAI Technology Co., Ltd.

- Supervisor:** [Jie Fang](#) (former Chief AI Architect, IBM China)
- Delivered a powerful design tool by engineering a full-stack application; fine-tuned **Stable Diffusion** with **LoRA** and **ControlNet** to enable intuitive, controllable features like text-to-image and inpainting.

### AI Algorithm Intern May 2021 – Aug 2021

Shanghai Feifan Technology Co., Ltd.

- Supervisor:** [Jie Fang](#) (former Chief AI Architect, IBM China)
- Developed a fashion aesthetics recommendation system leading to a **20% inventory reduction** for the client.

## Skills

**Languages:** Python, JavaScript

**Frameworks & Tools:** PyTorch, PyTorch Lightning, Docker, WandB, Gradio

**Systems:** HPC Cluster, Server Maintenance