

# Weiping Zhang

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## EDUCATION

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**University of Southern California** 08/2021 – 06/2023

- MS major: Electrical and Computer Engineering (Machine Learning and Data Science)

**Beijing Normal University** 09/2017 – 06/2021

- BS major: Science and Technology of Electronic Information GPA: 87.3/100
- Thesis title: *AI based Classroom Teaching Audio Analysis System Design*

## INTERNSHIP EXPERIENCE

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*Platform and Content Group, Tencent Corporation*

**Search Algorithms Intern** 10/2020 – 01/2021

- Ranked search results of Tencent Search with Learning to Rank(LightGBM).
- Classified search results of Tencent News with DeepText model from Tencent.
- Designed weights extraction models for features mining on Chinese ranked text data.

*Institute of Automation, Chinese Academy of Sciences*

**Courses Development Intern / Self-Media Editor Intern** 04/2020 – 09/2020

- Designed the curriculum “2D Computer Vision”, including contents of different topics and related experiments.
- Prompted introducing videos about frontier technology in AI fields and instructing videos about the basic knowledge of Machine Learning and Deep Learning.

## RESEARCH EXPERIENCE

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**Refined Sparse Representation Based Similarity Category Image Retrieval** 03/2021 – 10/2021

**Core group member. Advisor: Hao Wu**

- Collected and sorted multi-source image data to build test and verification databases
- Contrasted cross mutual sparse coding model with other features in the similarity category image retrieval.

**AI Based Class Teaching Evaluation System** 06/2020 – 04/2021

**Leader. Advisor: Junqi Guo**

- Designed class teaching audio analysis system to evaluate:
  - i. Teaching content composition with modified TF-IDF algorithms.
  - ii. Class discourse classification and organizational structure with TextRCNN.

**Social Media Research on Propagation Law and Control Strategy of Public Emergencies** 09/2019 – 06/2020

**Core group member. Advisor: Dan Yu**

- Designed the experimental compound algorithm with collaborative filtering and text matching.
- Built the behavior experiment system to generate information flow and record testers' behaviors.

## PUBLICATION

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- Hao Wu, Xueying Liu, **Weiping Zhang**, et al. “Refined Sparse Representation Based Similarity Category Image Retrieval” *Journal of Visual Communication and Image Representation*. Under Review.
- Yuqiao Yan, **Weiping Zhang**, et al. “Personalized information recommendation simulation system based on compound recommendation algorithm” *2019 2nd International Conference on Mechanical, Electrical and Material Application*.

## PROFESSIONAL SKILLS

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- Python / C++ / MATLAB / PyTorch / SQL