# XINLEI PEI

**Email** · **G** Github · **A** Homepage · **A** ■ Chinese

# **EDUCATION**

Shandong University of Finance and Economics, Jinan, China

2020.09 - 2023.06

*M.S.* in Computer Applied Technology

(Supervisor: Prof. Zheng Liu, GPA: 3.7/4.0, Ranking: 1/28)

Shandong University of Finance and Economics, Jinan, China

2016.09 - 2020.06

B.S. in Computer Science and Technology

(GPA: 3.4/4.0, Ranking: Top 15%)

# **Q** RESEARCH INTERESTS

Interested in deep learning, information retrieval, data mining, multimodal large language models, etc. Focus on cross-modal retrieval (*e.g.*, image-text matching). You can check my publications with Google Scholar or Semantic Scholar.

# PUBLICATIONS

• <u>Xinlei Pei</u>, Zheng Liu, Shanshan Gao, Yijun Su. *Complementarity is the king: Multi-modal and multi-grained hierarchical semantic enhancement network for cross-modal retrieval.* 

Expert Systems with Applications, 2023, 216: 119415.

♦ JCR: Q1 ♦ IF: 8.6 ♦ CCF-C ♦ Link ★ PDF © Code

• Zheng Liu, Xinlei Pei, Shanshan Gao, Changhao Li, Jingyao Wang, Junhao Xu. Perceive, Reason, and Align: Context-guided cross-modal correlation learning for image—text retrieval.

Applied Soft Computing, 2024, 154: 111395.

♦ JCR: Q1 ♦ IF: 8.7 ♦ Link ♣ PDF

• Junhao Xu, Zheng Liu, <u>Xinlei Pei</u>, Shuhuai Wang, Shanshan Gao. FB-Net: Dual-Branch Foreground-Background Fusion Network With Multi-Scale Semantic Scanning for Image-Text Retrieval.

IEEE Access, 2023, 11: 36516-36537.

♦ JCR: Q2 ♦ IF: 3.9 ♦ Link ♣ PDF

• Shuhuai Wang, Zheng Liu, Xinlei Pei, Junhao Xu. HAAN: Learning a Hierarchical Adaptive Alignment Network for Image-Text Retrieval.

Sensors, 2023, 23(5): 2559.

♦ JCR: Q2 ♦ IF: 3.9 ♦ Link ♣ PDF

• Zheng Liu, Shaojing Yuan, Xinlei Pei, Shanshan Gao, Huijian Han. Cross-media retrieval via fusing multi-modality and multi-grained data.

Scientia Iranica, 2023, 30(5): 1645-1669.

♦ JCR: Q2 ♦ IF: 1.4 ♦ Link ♣ PDF

# THONORS AND AWARDS

## Honorary Titles

- Excellent Graduate Student of Shandong University of Finance and Economics. (**Top 5**%) 2023.06
- Excellent Master Dissertation Award of Shandong University of Finance and Economics. (Top 5%) 2023.06
- Excellent Individual in Postgraduate Research Achievements of Shandong University of Finance and Economics. (Top 1%)
- Excellent Postgraduate Student of Shandong University of Finance and Economics. (**Top 5**%) 2021.11
- Excellent Bachelor Dissertation Award of Shandong University of Finance and Economics. (**Top 5**%) 2020.06

### **&** Competition Awards

- 1<sup>st</sup> Prize of *The 6<sup>th</sup>* "Kunpeng Cup" Shandong New Energy · Software Innovation and Entrepreneurship Competition, Department of Industry and Information Technology of Shandong Province, China. (3<sup>rd</sup> member) 2022.11
- 1st Prize of The 13th "Challenge Cup" Shandong Provincial Undergraduate Entrepreneurship Plan Competition, Shandong Association for Science & Technology, China. (2nd member) 2022.10
- 2<sup>nd</sup> Prize of "Pu Yi Award" The 6<sup>th</sup> National College Student Translation Competition, Oversea English, China. (**Solo**)
- 1st Prize of *The 15th "SPSSPRO Cup" Mathematics China Mathematical Modeling Network Challenge*, Inner Mongolia Mathematical Society, China. (**Leader**) 2022.01
- 3<sup>rd</sup> Prize of "*Huawei Cup*" 18<sup>th</sup> China Postgraduate Mathematical Modeling Contest, Association of Chinese Graduate Education, China. (2<sup>nd</sup> member) 2021.12
- 1st Prize of National Undergraduate Mathematical Modeling Contest (Shandong Division), China Society for Industrial and Applied Mathematics, China. (Leader) 2019.10

### **Scholarships & Fellowships**

- Excellent Academic Achievement Scholarship of Shandong University of Finance and Economics. (**Top 1**%) 2023.05
- Graduate "Lu Xin" Research Scholarship of Shandong University of Finance and Economics. (Top 1%) 2023.03
- 1st Prize Scholarship of Shandong University of Finance and Economics. (**Top 5**%) 2022.11
- 1st Prize Scholarship of Shandong University of Finance and Economics. (**Top 5**%) 2021.11
- 2<sup>nd</sup> Prize Scholarship of Shandong University of Finance and Economics. 2020.11
- 2<sup>nd</sup> Prize Scholarship of Shandong University of Finance and Economics, 4 Times. 2016-2019

# SKILLS

## Programming Languages

- Python, MATLAB, Shell/Bash. (Proficient)
- Java, SQL, JavaScript, HTML/CSS. (Know all about)
- C/C++, Lua, Ruby. (Understand)

#### ## Frameworks & Tools

- PyTorch, PaddlePaddle, Pandas, Scikit-learn, Keras, Jupyter Lab/Notebook, Git. (Proficient)
- Huggingface-transformers, LangChain, TensorFlow, Mysql. (Know all about)
- Hadoop, Kafka, Zookeeper, Redis, SpringBoot. (Understand)

#### **Others**

- Languages: CET-6
- LATEX, Markdown, PowerPoint, Excel, Visio