Xin Zhang

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Summary

Primary research interests in computer vision, deep learning, and machine learning, published papers in several international conferences. **Extensive teaching experience** for multiple courses, including Algorithm Analysis and Design, Operating Systems, Object-oriented Programming(C++) and Real-Time Systems (C & Matlab). **Active learner** with a strong background in computer science, familiar with various mainstream programming languages and software libraries. **Competent programmer** with experience in several industrial projects, including Web, WinForm, Android APPs and applied DL systems.

Education

- **University of South Carolina** — Columbia, SC, the US
  PhD candidate in Electrical Engineering; — *Jan 2020 - Dec 2023*
- **University of South Carolina** — Columbia, SC, the US
  PhD student in Computer Science; — *Aug 2019 - Jan 2020*
- **Chongqing University** — Chongqing, China
  Master in Software Engineering; — *Sep 2016 - Jun 2019*
- **Chongqing University** — Chongqing, China
  Bachelor in Software Engineering; — *Sep 2012 - Jun 2016*

Teaching Experience

- **Instructor** — University of Southern Maine
  System Programming — *Spring 2024*
- **Instructor** — University of Southern Maine
  Computer Organizations — *Spring 2024*
- **Instructional Assistant** — University of South Carolina
  Real Time Systems — *Fall 2022, Spring 2023*
- **Instructional Assistant** — University of South Carolina
  Autonomous Vehicle Summer Camp — *July 2022*
- **Instructional Assistant** — University of South Carolina
  Vex Robotics Summer Camp — *June 2022*
- **Teaching Assistant** — University of South Carolina
  Operating Systems — *Fall 2019*
- **Teaching Assistant** — Chongqing University, China
  Algorithm Analysis and Design — *Fall 2018, Spring 2019*
- **Teaching Assistant** — Chongqing University, China
  Object-oriented Programming — *Spring 2018*

Publications

[1] **Xin Zhang**, Yuqi Song, Xiaofeng Wang, and Fei Zuo. "D-Score: A White-Box Diagnosis Score for CNNs Based on Mutation Operators". In: *The 19th anniversary of the International Conference on Advanced Data Mining and Applications,* 2023.

[2] **Xin Zhang**, Yuqi Song, Fei Zuo, Zheqing Zhou, and Xiaofeng Wang. "Towards Imbalanced Large Scale Multi-label Classification with Partially Annotated Labels". In: *The 21st IEEE/ACIS International Conference on Software Engineering Research, Management and Applications*. 2023.

[3] **Xin Zhang**, Rabab Abdel, Yuqi Song, and Xiaofeng Wang. "Depth Monocular Estimation with Attention-based Encoder-Decoder Network from Single Image". In: *The 24th IEEE International Conference on High Performance Computing and Communications*. 2022.

[4] **Xin Zhang**, Rabab Abdel, Yuqi Song, and Xiaofeng Wang. "An Effective Approach for Multi-label Classification with Missing Labels". In: *The 24th IEEE International Conference on High Performance Computing and Communications*. 2022.

[5] Translated by **Xin Zhang**, Hong Xiang, and Li. Fu. "Foundations of Quantum Programming (Chinese)". In: *Chinese Machine Press*. 2019.

[6] **Xin Zhang**, Hong Xiang, and Yuqi Song. "Meta-Path and Matrix Factorization Based Shilling Detection for Collaborate Filtering". In: *International Conference on Collaborative Computing: Networking, Applications and Worksharing*. Springer. 2018, pp. 3–16.

[7] **Xin Zhang**, Hong Xiang, and Tao Xiang. "An efficient quantum circuits optimizing scheme compared with qiskit". In: *International Conference on Collaborative Computing: Networking, Applications and Worksharing*. Springer. 2018, pp. 467–476.

[8] Fei Zuo, **Xin Zhang**, Yuqi Song, Junghwan Rhee, and Jicheng Fu. "Commit Message Can Help: Security Patch Detection in Open Source Software via Transformer". In: *The 21st IEEE/ACIS International Conference on Software Engineering Research, Management and Applications*. 2023.

[9] Rabab Abdel, **Xin Zhang**, Zhenyao Wu, and Xiaofeng Wang. "PLMCL: Partial-Label Momentum Curriculum Learning for Multi-Label Image Classification". In: *The European Conference on Computer Vision (ECCV 22') L2ID Workshop*. 2022.

[10] Rabab Abdel, **Xin Zhang**, Mostafa M. Fouda, and Xiaofeng Wang. "G2NetPL: Generic Game-Theoretic Network for Partial-Label Image Classification". In: *The 33rd British Machine Vision Conference (BMVC 22')*. 2022.