Wentao Yang
https://srceventt.github.io/
Email: yangwt2022@shanghaitech.edu.cn
Mobile: +86 13611719830

Education Background

- **ShanghaiTech University, China** **Sept. 2022 - Jun. 2026 (Expected)**
  Bachelor of Engineering in Computer Science and Technology; GPA: 3.68/4
- **University of Wisconsin-Madison, USA** **Jan. 2025 - May. 2025 (Expected)**
  Thematic Visiting International Student Program (VISP) in Computer Sciences

Research Project Experience

- **Predicting the interactions of Weibo** **Nov. 2024 - Jan. 2025**
  - Six months of Weibo data were analyzed to forecast engagement metrics such as forwards, comments, and likes to be received 24 hours after publishing.
  - Developed a four-category user classification system (Zombie, Most Zombie, Likely Zombie, and Active Users) that improved prediction accuracy from 20.08% to 28.5%, or by 25.81%.
  - Proposed the FRESH framework, which incorporates XGBoost and Random Forest with 39 estimators. It eventually scored 31.51% and placed 7th among all competition participants on Tianchi.
- **Advised method for quadratic programming** **Dec. 2024 - Jan. 2025**
  - Reviewed 23 quadratic programming solvers developed over the last 20 years and tested them against 100 independent problem instances of 100 variables each.
  - Improved the IRWA algorithm with dual penalty parameters, M_1, M_2, for different types of constraints, achieving convergence improvement by 1.5 times against the standard implementation.
  - Tested 11 state-of-the-art solvers; the commercial implementations clarabel, daqp had sub-0.01 second solving times, while our ADAL/IRWA algorithms gave better constraint satisfaction.

Internship Experience

- **Mobile Perception Lab, ShanghaiTech University, China** **Oct. 2023 - Jul. 2024**
  Research Assistant under Prof. Laurent Kneip
  - **Research Contribution**: Contributed to "DynOPETs: A Versatile Benchmark for Dynamic Object Pose Estimation and Tracking in Moving Camera Scenarios", currently under review at IEEE Robotics and Automation Letters (RA-L).
  - **Dataset Creation**: Created a large-scale dataset for object pose estimation, ensuring high-quality data acquisition across various experimental scenarios for research purposes.
  - **Object Pose Estimation**: Worked on cutting-edge object pose estimation research, helping design a comprehensive data processing pipeline based on extensive literature review.
  - **Pipeline Optimization**: Improved data processing workflows through algorithmic innovations and tool optimizations, significantly enhancing the project's efficiency.
- **Knowledge Computing Laboratory, USTC, China** **Aug. 2024 - Present**
  Research Assistant under Prof. Yi Zhou
  - **Multimodal Large Language Model Development**: Fine-tuned LLaVA-v1.5-7b model using prompt-image-answer triplets; implemented answer re-ranking and evaluation metrics to improve model performance.
  - **Financial Data Visualization**: Reconstructed ETF time series charts with technical indicators (white/yellow lines, red/green bars) and smoothed curves for better representation of financial data.
  - **Financial Model Application**: Deployed and fine-tuned TimesFM for stock market analysis, assessing its performance in identifying entry points and quantifying returns.

Awards & Activities

- Third Prize in Men's Team Bowling, Shanghai Student Sunshine Sports League (Higher Education Division), 2024

Skills & Awards

- **Languages**: Chinese (Native), English (Fluent, TOEFL 100)
- **Computer Skills**: Python; C/C++; MATLAB; Javascript/Html/CSS; SQL