Rui Wang

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Education Profile

University of Michigan, Ann Arbor **Aug 2025 - Present**
- Master of Science in Information, major in Data Analysis, with GPA 4.000/4.000

Shanghai Jiao Tong University - Global College Institute **Sept 2022 - Present**
- Major in Electrical and Computer Engineering and Minor in Computer Science, with GPA 3.641/4.000

Cornell University **Jan - May 2025**
- Exchange program at College of Engineering, with GPA 3.850/4.000

Work & Leadership Experience

OpenAGI Research Foundation, Inc. **Jan - Aug 2025**
- Contributed to *Lux*, achieving state-of-the-art performance on Online-Mind2Web (**83.6**), outperforming Google Gemini CUA (69.0), OpenAI Operator (61.3), and Anthropic Claude Sonnet 4 (61.0).
- Built Python-based tooling to capture user operations and applied computer-vision methods to reproduce end-to-end workflows for training and evaluation.
- Generated operation datasets on OSWorld for terminal and Office tasks, improving data diversity.
- Paper: *OSGym: Super-Scalable Distributed Data Engine for Generalizable Computer Agents* (arXiv:2511.11672).

Salesforce, Inc. **Aug - Dec 2025**
- Completed **10** user interviews and collected **100+** survey responses on AI tool usage for privacy analysis.
- Visualized usage patterns in Tableau and identified potential privacy risks from data signals and user feedback.

Shanghai Baosight Software Co., Ltd. **Aug - Sep 2024**
- Built short-term metro passenger-flow surge prediction models and achieved **86%** accuracy in predicting crowd surges to support operational planning.
- Analyzed station-level passenger flow data, engineered time-series features, trained binary classifiers, and iterated with ROC/AUC-driven validation.

Academic Background

Online judge platform development **Jan 2024 - Present**
- Designed and implemented an evaluation environment based on Go programming language.
- Sandboxed user code with containers to protect runtime stability.
- Developed a Prometheus-based logging and monitoring module to track platform runtime status in real-time, improving system maintainability and troubleshooting efficiency.

Surgical Video Tool Segmentation & Evaluation with SAM2 **Jul 2024 – Oct 2025**
- Performed instance segmentation of surgical instruments in videos using SAM2.
- Evaluated segmentation performance using mIoU and Dice coefficients, and analyzed model robustness across complex surgical scenarios.
- Improved automation and stability by optimizing prompt generation for SAM2 in difficult cases.
- Paper: *Systematic Evaluation and Guidelines for Segment Anything Model in Surgical Video Analysis* Accepted by *npj Digital Surgery* (Nature Portfolio), Oct 2025. (arXiv:2501.00525)

Skills, Activities & Interests

- **Languages**: Fluent in English; Conversational in Mandarin.
- **Technical Skills**: Python, R, C/C++, Go, MATLAB, SQL, SAS, HTML/CSS, JavaScript, Bash, Linux, Git, Docker, LaTeX, AWS, Tableau, PowerBI
- **Certifications**: Basic SAS Certification; Basic Teaching Assistant Certificate.
- **Activities**: Teaching Assistant at SJTU Global College (2023–2025); President of Technical Dept. in Student Union (Sept 2022–2025) — hosted workshops (Git, Bash, LaTeX, Vim, VSCode)
- **Honors**: 1st Place A2 Data Dive (Nov 2025); Merit Student (Oct 2024); Scholarships (Nov 2024)