

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
Software Engineer Intern (<i>Agent Tooling</i>)	United States (Remote)
• Achieved 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).	
• Engineered 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: <i>OSGym: Super-Scalable Distributed Data Engine for Generalizable Computer Agents</i> (arXiv:2511.11672).	
Salesforce, Inc.	
Research Intern	Aug - Dec 2025
• Conducted 10 user interviews and analyzed 200+ survey responses on AI tool usage for privacy analysis.	United States (Remote)
• Built Tableau dashboards to visualize usage trends and translated findings into actionable privacy risk insights.	
Shanghai Baosight Software Co., Ltd.	
Machine Learning Intern	Aug - Sep 2024
• Developed short-term metro passenger-flow surge prediction models across 523 stations, achieving 86% accuracy to support operational planning and proactive crowd management.	Shanghai, China (On-site)
• 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
• GitHub: https://github.com/joint-online-judge/JOJ3	
• Implemented a Go-based online judge execution and scoring system, supporting 6 programming languages.	
• Implemented container-based sandboxing to isolate user code and improve platform reliability.	
• Developed Prometheus-based logging and monitoring module to track system health in real time.	
Surgical Video Tool Segmentation & Evaluation with SAM2	
• Performed instance segmentation of surgical instruments in videos using SAM2.	Jul 2024 – Oct 2025
• Evaluated segmentation performance using mIoU and Dice coefficients, and analyzed model robustness across complex surgical scenarios.	
• Improved automation by optimizing prompt generation for SAM2 in difficult cases.	
• Paper accepted by <i>npj Digital Surgery</i> (Nature Portfolio): <i>Systematic Evaluation and Guidelines for Segment Anything Model in Surgical Video Analysis</i> . (arXiv:2501.00525)	
Database tool development	
• Developed basic functionalities for database tool	Dec 2024
• Added multi-threading, improving efficiency by 3 times.	
Service System Modeling and Design	May 2025

- Modeling and analyzing service systems for ambulance services in NYC.

TECHNOLOGIES

- **Programming Languages:** Python, R, C/C++, Go, Matlab, SQL, Elm, SAS, HTML/CSS, JavaScript, Bash
- **Working Space:** Linux, Git, Docker, Latex, Vim, Shell, AWS, Tableau, PowerBI

CAMPUS ACTIVITIES

Teaching Assistant in SJTU - Global College

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|--|-----------------|
| • ECE4820J <i>Operating Systems</i> Course | Sept - Dec 2025 |
| • ECE2810J <i>Data Structures and Algorithms</i> Course | Sept - Dec 2024 |
| • ENGR1000J <i>Introduction to Engineering</i> Course | May - Aug 2024 |
| • ENGR1510J <i>Introduction to Computers and Programming</i> Course | Sept - Dec 2023 |
| • Design projects, hold weekly labs and recitation classes, grade assignments and exams. | |

Technical Department of Student Union in SJTU - Global College

Sept 2022 - Present

President and Annual Excellent Volunteer

- Organize and host multiple workshops , with topics including Git, Bash, LaTeX, Vim, VSCode, etc.
- Maintain the SJTU - Global College's dance party mini-program.

HONORS AND SCHOLARSHIPS

- Nov 2025: *First Place in A2 Data Dive: Campaign Finance Transparency in Michigan.*
- May 2025: *Basic SAS(Statistics Analysis System) Certification.*
- Nov 2024: *Scholarship for Student Development.*
- Oct 2024: *Merit Student of SJTU.*
- July 2024: *Third Prize in the China-U.S. Young Maker Competition.*
- May 2024: *Software Copyright Registration by the National Copyright Administration of China.*
- Dec 2023: *Basic Teaching Assistant Certificate.*
- July 2023: *Annual Excellent Volunteer in UM-SJTU JI Student Union.*
- June 2023: *Best Game Design Award in ENGR1000J of UM-SJTU JI.*
- May 2023: *Honorable Mention in the Mathematical Contest in Modeling organized by COMAP.*