Yuting Zhou

📞 +1 (848)-230-9757 | ✉ zyt680129@gmail.com | 🔗 linkedin.com/in/yuting-zhou-magicherry | 👤 yutingzhouwebsite.vercel.app

EDUCATION

Rutgers University, New Jersey, United States — 09/2024 - Expected 06/2026
- **Major:** Master Student in Computer Science

Shanghai Institute of Technology, Shanghai, China — 09/2020 - 06/2024
- **Major:** Bachelor of Engineering in Software Engineering (**GPA:** 3.7, Top 10%)

AWARDS & CERTIFICATES

- School-level Scholarship: 2nd Prize (2023, 2022), 3rd Prize (2022, 2021, 2020)
- Alibaba Cloud Certified Associate – Big Data, Huawei Certified ICT Associate – Intelligent Computing

RESEARCH EXPERIENCE

Research Assistant | Python, PyQt, Pandas, NumPy, Ollama, Docker — 06/2025 - Present
RUTGERS Center for Advanced Infrastructure and Transportation (CAIT) — New Jersey, United States
- Processed 80k+ rail network records with automated Pandas scripts, improving anomaly detection efficiency.
- Optimized NJT Graph runtime from 8 min to <3 min through NumPy vectorization.
- Developed Qt-based GUI for NJT Graph Processor adopted by 3 teams, enabling non-programmers to use backend tools.
- Automated consistency checks with LLMs, cutting manual verification by 50% using prompt engineering and Dockerized deployments.

INTERNSHIP EXPERIENCE

Front-end Engineer | Intern | JavaScript, Vue, WebSocket, MongoDB — 06/2023 - 08/2023
Shanghai Tenchii Digital Tech Co., Ltd. (Tencent × Shanghai Metro Joint Venture) — Shanghai, China
- Contributed to reducing Shanghai Transit App page load latency by 30%, which improved retention by 10%.
- Assisted in building real-time lottery system for 500K+ users with <200ms latency via WebSocket + MongoDB.
- Componentized modules in Vue, enabling 5+ new features in one quarter.
- Delivered 3 cross-team prototype interfaces by collaborating with PMs and iterating with Axure and Vue.

Software Test Engineer | Intern | Pytest, JUnit, Selenium — 06/2022 - 09/2022
Shanghai Spacecraft Electromechanical Equipment Co., Ltd. — Shanghai, China
- Built automated test environment across 10+ hardware configs with 50+ cases using Pytest/JUnit and CI pipeline.
- Detected 5 high-priority defects via Selenium UI automation, reducing production risk by around 20%.

PROJECT EXPERIENCE

AyeNote Online Cloud Notes | Vue 3, Django, MySQL, BeautifulSoup   ⊙ github.com/Magicherry/AyeNote — 05/2022 – 04/2023
- Improved web crawler parsing accuracy from 56% → 78% on 30k+ pages using async + SimHash.
- Reduced per-note curation time by 60% by integrating LLM summarization.
- Supported real-time collaboration for 20+ users with <250ms latency via Django Channels.

King of Bots | Vue 3, Spring Boot, MySQL, WebSocket, JWT   ⊙ github.com/Magicherry/King-of-Bots — 05/2022 – 11/2022
- Developed a full-stack battle platform with Vue 3 + Spring Boot, supporting 50+ concurrent matches <250ms latency.
- Designed 15+ secure REST APIs with JWT authentication and role-based access control.
- Improved engagement by 20% through responsive UI and A/B tested layouts.

Real-time Pose Estimation | MoveNet, PyTorch, TensorFlow   ⊙ github.com/Magicherry/Pose_Estimation — 09/2023 – 05/2024
- Achieved real-time skeletal detection at 30+ FPS with >80% exercise recognition accuracy.
- Fine-tuned TensorFlow models to support 3 exercise types with avg. precision of 0.87.
- Beta-tested with 50+ users, gaining 70% positive engagement on the demo system.

EXTRACURRICULAR EXPERIENCE

Shanghai Institute of Technology — 09/2020 – 06/2024
- Active member of Algorithm, Software Engineering, and Robotics clubs, organizing workshops, contests, and technical activities.
- Mentored peers by resolving 30+ technical questions per semester and coordinated 10+ events annually.

TECH STACK & LANGUAGES

Programming	C++, Java, Python, Go
Operating Systems	Windows, Linux, macOS
Databases	SQLite, MySQL, Redis, MongoDB
Frontend	HTML, CSS, JavaScript, Node.js, Vue 3, React, Next.js
Backend	Spring / Spring Boot, Django / Flask / FastAPI, Gin, RESTful APIs, Microservices
Containers	Docker, Kubernetes (K8s)
Data & ML	NumPy, Pandas, Matplotlib, scikit-learn, PyTorch, TensorFlow
Languages	English, Mandarin Chinese *(bilingual)*