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 RUTGERS Center for Advanced Infrastructure and Transportation (CAIT) 06/2025 - Present

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, China

Shanghai Tenchii Digital Tech Co., Ltd. (Tencent × Shanghai Metro Joint Venture)

- 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, China

- Shanghai Spacecraft Electromechanical Equipment Co., Ltd.
- 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

- \bullet Improved web crawler parsing accuracy from 56% \rightarrow 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.
- $\bullet\,$ 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, Matplotlab, scikit-learn, PyTorch, TensorFlow

Languages English, Mandarin Chinese (bilingual)