

# SONGYU WANG

Fort Worth, TX, 76104 • Open to relocation  
(812) 201-9470 • [wangsongyuf@gmail.com](mailto:wangsongyuf@gmail.com)  
[linkedin.com/in/wangsongyu](https://www.linkedin.com/in/wangsongyu)

## SUMMARY

Software Test Engineer (Quality Assurance Specialist) with **seven years of experience** developing and executing **end-to-end(E2E) test strategies** in highly regulated industries. Skilled in both **manual and automated testing**, with a strong ability to design and maintain **test frameworks and CI/CD**(continuous integration and continuous delivery or deployment) pipelines that integrate seamlessly into **SCRUM/Agile** environments. Adept at managing complex **testing processes, emphasizing traceability, defect management, and functional testing**. Consistently delivers reliable, high-quality software by driving rigorous testing and quality assurance practices.

## EXPERIENCE

**Jun 2020 - Oct 2025**

**Benchling**

**San Francisco, CA**

*Software Engineer, Quality*

- Contributed to various company-wide quality initiatives for a cloud-based software company that develops software platforms powering breakthrough research on biotherapeutics, biofuels, and biomaterials
- Enhanced test infrastructure by developing and maintaining **multiple unit and E2E test frameworks** using **TypeScript (Cypress and Playwright), Python, and Bazel**
- Built and managed multiple **CI/CD pipelines** for a **300-person** engineering organization, utilizing a range of tools including **AWS, Terraform, Buildkite, Webpack, Datadog, and Docker**
- Supported TechOps (Technical Operations) by creating and analyzing **observability dashboards for system health and cost governance**, leading to resource allocation recommendations worth close to **a million dollars annually**
- Increased **E2E automated testing coverage by 30%** across multiple teams and components with Cypress, and collaborated on the development of over 300 new E2E test cases
- Improved testing processes for tech stacks including **React, Flask, GraphQL, SQLAlchemy, PostgreSQL, and OpenSearch** by creating SOP(standard operating procedure)s for test case management and designing a **Jira/Xray** integrated test traceability system
- Facilitated **onboarding and mentored** multiple new Quality Engineering (QE) team members

**Jul 2018 - Apr 2020**

**HeartFlow, Inc**

**Redwood City, CA**

*Software Engineer in Test*

- Led **quality assurance** and testing for platform and service components in a **SCRUM/Agile** environment at a medical technology company specializing in software for 3D coronary artery modeling
- Contributed to the development and verification of multiple projects, including three **web applications**, three **backend/API services**, and four workflow/product-related components

- Enhanced the **stability and efficiency** of legacy test frameworks, enabling continuous delivery of new features and improvements in newer frameworks
- Developed and maintained internal tools to streamline development and verification processes
- Developed and performed **manual and automated tests** using **Python and JavaScript** to validate and refine product requirements, ensuring accuracy during implementation
- Identified and managed hundreds of **defects and bugs**, driving resolutions to enhance product quality
- Conducted comprehensive **verification and validation** activities, including **test plan development, result analysis, and report writing**. Collaborated with cross-functional teams to perform **functional, regression, and system-level testing**, ensuring all documentation complied with corporate and federal standards
- Prepared detailed **Test/Risk Traceability Reports**, documenting test execution outcomes and linking each product requirement and risk to the appropriate tests

## **EDUCATION & CERTIFICATIONS**

**Rose-Hulman Institute of Technology (2014 - 2018)**

**Terre Haute, IN**

*Bachelor of Science, Computer Science and Software Engineering*

**ISTQB(International Software Testing Qualifications Board) | Certified Tester AI Testing (2024)**

**AWS | AWS Well-Architected Best Practices & Architecting on AWS with AWS Jam (2024)**

**Scrum.org | Professional Scrum Product Owner I (2019) & Professional Scrum Master I (2018)**