

Wenjie Luo

Agent Application Engineer | Graduating Jan 2027

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PROFILE

Build Python and TypeScript agent applications with deterministic tools and human approval. Turn business workflows into APIs, state transitions, execution traces and automated acceptance tests.

EDUCATION

- National University of Singapore | MSc Civil Engineering**Aug 2025 - Jan 2027
- Transport focus; research in transportation information and control.
- Chang'an University | BEng Transportation Engineering**Sep 2021 - Jun 2025
- GPA 3.16/5.0; approximately top 15% of the cohort.

PROJECTS

- Civil Buddy | Agent Runtime and Tools**Jul 2026 - Present
- Built session scheduling, a tool engine, policy checks and recovery for 66 role workflows; required human confirmation for high-risk writes and retained failure audit records.
 - Linked packing, confirmation and visualization; passed 128 deterministic evaluations. Separate shadow tests compare predefined steps with tool calling, including a keyless policy fallback.
- Glass Box | Agent Observability Middleware**Aug 23, 2026 - Present
- Built observability on the official starter: parent-child span waterfalls show tools, tokens, estimated costs and retries, with trace queries and OTLP/JSON export.
 - Built keyless replay demos and policy tests for 22 bypass attempts and 11 allowed cases; Node 22/24 CI runs 150 tests in 21 files, type checks, builds and smoke tests.
- EDA Copilot | Traceable Engineering Q&A**Sep 2026
- Ran OpenROAD's nangate45/gcd example from RTL to GDSII; indexed reports, logs and workflow documentation into 1,215 chunks with source line references.
 - Implemented BM25, TF-IDF and hybrid retrieval to assemble answers from cited excerpts; added CI checks for retrieval, metric definitions, run identity and supporting evidence.

EXPERIENCE

- Far East Facade | Project Engineer, Engineering Department**Jun 2026 - Present
- Built a Python workflow to extract delivery batches and test results from supplier emails, supporting delivery plans for 15 material types.
- Caixun Technology | Product Intern**Jun 2025 - Aug 2025
- Moved the hard-to-find prize-draw entry from the page bottom to a side pop-up to improve visibility; defined requirements, designed interaction prototypes and followed development and testing.
 - Independently wrote 3 PRDs and prototyped 5 core pages in Axure; proposals were accepted and scheduled for development. Tracked fixes and retesting, helping resolve over 10 issues.

SKILLS

Development: Python, TypeScript, React, Fastify/FastAPI, SQL, Git, CI
Agents: tool calling, session scheduling, human approval, tracing/OTLP, policy checks, recovery