

JIAWEN (EDDIE) LIN

Backend & AI Agent Engineering Intern • Available full-time Dec 2026 – Feb 2027

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EDUCATION

University of New South Wales (UNSW Sydney)

Sydney, Australia

Bachelor of Computer Science

Feb 2025 – Dec 2027 (expected)

- **Coursework:** Algorithm Design & Analysis (HD, 88/100), Data Structures & Algorithms, Software Construction; in progress: Computer Networks, OO Design in Java.

OPEN SOURCE

mlflow – PR #26485, **merged (Oct 2026)**: switched name/ID validators from `re.match` to `re.fullmatch` so inputs with a trailing newline no longer pass validation (closes #26425).

dspy – PR #10575, **merged (Oct 2026)**: render PEP 604 unions in adapter prompts. **haystack** – PR #13170 (under review): DocumentCleaner strips repeated headers/footers only at page start/end.

PROJECTS

X-Report-Reminder – LLM Research Digest Pipeline | Python, asyncio, httpx, DeepSeek API, SQLite

May 2026

- Async CLI pipeline: pulls posts and outbound links from tracked X accounts, cleans pages (`httpx` + `trafilatura`) and writes structured LLM summaries to Obsidian; **idempotent** runs via SQLite URL tracking and in-batch de-duplication.
- Kept the system prompt byte-stable to maximise DeepSeek **prefix-cache hits**; migrated the model from Claude to DeepSeek via the OpenAI-compatible SDK; added a `--dry-run` mode.
- Writes summaries as Obsidian Markdown with YAML front matter; added single-account fetch mode for safe testing and supported cookie-session and TOTP 2FA login.

AI Copilot – LLM Browser Assistant | TypeScript, Chrome Extension MV3, Vitest, GitHub Actions

Feb 2026

- **Provider factory** over Gemini REST, OpenAI-compatible APIs and on-device Gemini Nano for selection explanations, prompt refinement and email drafting; fixed a side-panel startup **race condition** by queuing messages in session storage.
- GitHub Actions pipeline: type-check, **33 Vitest unit tests across 8 suites**, build, artifact verification and packaging.
- Side-panel features include text-selection explanations, prompt refinement and Gmail/Outlook reply drafting.

Project-Bounty – Mission Management REST Backend (team project) | TypeScript, Node.js, Express, Jest

Sep – Nov 2025

- **Authored 118 of 352 non-merge commits (~1/3 of the team)**: 4 REST endpoints with session validation, ownership checks, consistent HTTP errors and Jest HTTP regression tests; migrated auth modules from JS to TypeScript.
- Enforced a business rule blocking deletion of missions with assigned astronauts; added JSON-file persistence.

slides-to-obsidian – Claude Code Agent Skill | Prompt/skill design, Python (matplotlib), evals

Jun 2026

- Published an open-source agent skill that turns lecture decks (PDF/PPTX/HTML) into bilingual Obsidian notes, using a **two-pass design** that caches per-course context once for consistent weekly notes; shipped with 3 eval cases.

AgentOps – AI Incident Diagnosis Agent (in progress) | Python, FastAPI, Pydantic

Sep 2026 – Present

- Agent returning structured root cause, confidence and remediation for latency spikes, 5xx and pool exhaustion; wrote a 2,100-line spec (20 requirements, 10 incident scenarios, evaluation metrics); rule-based v0 API in progress.

TECHNICAL SKILLS

Languages & Backend: Python (asyncio, typing, pytest), FastAPI, Pydantic, REST API design, SQL/SQLite, TypeScript, Node.js, Express, C/C++, Java (in progress)

AI / LLM: function calling / tool use, multi-provider abstraction, prompt design & prefix caching, token-cost control, agent skills & evals

Engineering: Linux, Git (branches + PRs), GitHub Actions, GitLab CI, Jest, Vitest; daily AI-assisted coding (Claude Code) with human review of output

LEADERSHIP

Student Leadership Award, UNSW College (Feb 2026); **Volunteer Peer Mentor** (2025 T3, ~30 international students); UNSW CompClub workshop volunteer. **Languages:** Mandarin (native), English (professional).