

# Alain Schlessler

Agentic Engineer & Platform Architect

Germany (Remote) | +352 621 964 545 | [alain.schlessler@gmail.com](mailto:alain.schlessler@gmail.com)  
[alainschlessler.com](http://alainschlessler.com) | [github.com/schlessera](https://github.com/schlessera) | [linkedin.com/in/schlessera](https://linkedin.com/in/schlessera)

## Professional Summary

---

Agentic engineer and platform architect. 25+ years spanning government digital transformation, Fortune 500 enterprise architecture, and open-source infrastructure serving millions. Currently designing agent architectures, scaling reliability and quality for AI-native teams, and probing the product-engineering intersection for the next generation of software. Google Developers Expert for Web Technologies and AI.

## Core Competencies

---

**Architecture & Leadership:** System and protocol architecture, cross-team technical leadership, architectural decision-making, engineer mentorship, product-engineering collaboration.

**Agentic & AI Systems:** Agent architecture and multi-agent orchestration, context engineering, tool and skill surface design, provider-agnostic LLM integration, RAG and retrieval pipelines, evaluation harnesses, human-in-the-loop and approval flows.

**Platform & Infrastructure:** Event-sourced systems, CI/CD design and release automation, containerization and deployment pipelines, code generation and transformation pipelines, edge routing and reverse proxies, observability, performance optimization at scale, supply-chain security.

**Developer Experience & Tooling:** CLI and SDK architecture, machine-parseable / agent-consumable interfaces, plugin and skill systems, dev environment orchestration.

**Protocols & Standards:** Protocol design and implementation, agent interop protocols (MCP, A2A) and frameworks (ADK), agentic-web specifications (NLWeb), structured data (Schema.org / JSON-LD), REST / OpenAPI contracts.

**Languages:** TypeScript, JavaScript, PHP, Python, Go, Shell.

## Professional Experience

---

### Principal Architect — Yoast

2024–2026

Led architectural strategy for Yoast SEO (13M+ active installations). Cross-team technical authority across all engineering teams.

- Co-designed the **schemamap protocol** with R.V. Guha (inventor of schema.org) for NLWeb on WordPress — solved the problem of deploying a conversational AI protocol across 13M+ sites where you don't control the infrastructure. Protocol in active discussion for sitemaps spec integration.
- Built the **Schema Visualizer** — TypeScript application rendering entity graphs of hundreds of thousands of nodes at 60 fps using game-engine techniques (priority LOD, viewport culling, Canvas 2D bypass of React DOM). Shipped at [schema-visualizer.yoast.com](https://schema-visualizer.yoast.com).
- Ideated, designed, and prototyped multiple AI-powered products and features, then supported engineering teams through to production.
- Established partnership with **Microsoft's Office of the CTO** around NLWeb. **W3C NLWeb Community Group member** (nominated by R.V. Guha, October 2025).

### Applied Research & In-House Systems

2024–present

Active R&D in TypeScript and Python on agentic-system patterns and developer-facing AI infrastructure:

- **Event-sourced agent state** — Architectures where agent operations produce immutable event logs with materialized projections, enabling replay, undo semantics, and audit trails for AI decision flows.
- **Multi-agent orchestration platforms** — Concurrent, isolated agent environments with resource allocation, lifecycle management, persistence, and PR-workflow integration.
- **Agent-consumable developer tooling** — CLIs and interfaces designed machine-first, with structured output and token-budgeted context assembly as first-class design constraints.
- **Context engineering patterns** — Explicit allocation strategies, pre-computed representations with staleness cascades, retrieval architectures tuned for agent consumption.

This hands-on work informs architectural thinking across protocols, developer tooling, and agentic-system design.

### Fractional Engineering Lead — Navigation North

2024–present

Led engineering on the Museable platform. Designed data exchange protocols for interoperability across heterogeneous systems with incompatible schemas.

## Director of Technology & Innovation — XWP

2023–2024

Led technology strategy for an enterprise WordPress agency serving Fortune 500 clients.

- Identified the Privacy Sandbox as a strategic opportunity, built the business case, and built an automated scanning tool to detect compliance issues at scale.
- Secured an audit agreement with **Penske Media** (\$251M revenue, 180M+ monthly readers, brands including Variety, Rolling Stone, Billboard).

## Software Architect — XWP, Google Partnership

2019–2022

**Recruited by Google specifically** for architectural expertise. Led architecture of AMP for WordPress (400K+ active installs) and designed the PHP AMP Optimizer.

- Designed a **code generation pipeline** that compiles the AMP validation spec (protobuf / JSON) into an **opcode-optimized execution layer** — the entire validation engine lives in memory after first deployment with zero per-request overhead.
- Built **CI automation** that monitors the upstream AMP spec for changes and auto-generates pull requests with updated execution code — a live build pipeline with upstream-reactivity and request-shaping as its core primitives.

## Earlier Career

### WordPress Core Contributor — Yoast

2017–2018

Originated the fatal error protection approach (WP 5.2) that unlocked PHP modernization across 43% of the web. Publicly credited by the shipping engineer.

### Freelance Software Engineer & Consultant

2014–present

Toptal-vetted; architecture consulting for clients including University of Sydney.

### Administrator, Ministry of Justice, Luxembourg

2003–2014

Led digital transformation across a high-security judicial institution. Served as the institution's regulatory contact on data protection and led pre-GDPR data privacy initiatives well before industry-wide frameworks codified the practice. Designed prototype software that informed legislation enacted into Luxembourg law.

## Open Source Leadership

---

- **WP-CLI** — Sole maintainer since 2019. The CLI layer underpinning all WordPress automation, DevOps pipelines, and CI/CD workflows. **Bundled by every major hosting platform** (WP Engine, WordPress VIP, Kinsta, Bluehost, SiteGround, cPanel, Plesk) — powering a substantial share of the ~43% of the web that runs on WordPress. Shipped **supply-chain security** via checksum verification for the entire plugin repository.
- **Requests** — Co-maintainer of the HTTP client library bundled into WordPress Core — the default HTTP transport for every WordPress installation and a widely adopted PHP library across the ecosystem.
- **Modern WordPress Plugin Development (mwpd)** — Author and maintainer; the **basic-scaffold** plugin boilerplate was used by Google as architectural foundation for its two major WordPress plugins (AMP and Web Stories).

## Speaking & Thought Leadership

---

- “**After the Browser: AI Assistants as the New Gateway to Digital Services**” — WordCamp Asia 2025
- “**The Agentic SEO Stack: Context over Prompts**” — brightonSEO 2025 — listed in SEOFOMO “Best Published Decks”
- “**WordPress’s AI Roadmap: What the Industry Needs to Know**” — CloudFest 2026
- 50+ talks at international conferences across AI, SEO, and software engineering (2015–2026)

## Credentials & Affiliations

---

- **Google Developers Expert** — Web Technologies (2019–present), AI for Web Developers Key Focus Area (2025–present)
- **W3C NLWeb Community Group** — Member; nominated by R.V. Guha (October 2025)
- **CloudFest Hackathon** — Project mentor and organizing team member (2019–present, 7 editions)
- **Toptal** — Vetted top 3% network member and Speaker Expert (2016–present)