

Conrad Emde

Technical Skills Overview

EXTENDED TECHNICAL SKILLS

- **Core Stack & Languages:**
PHP (7/8), JavaScript, TypeScript,
Node.js, Python, SQL
- **Backend & APIs:**
GraphQL (server & client,
`webonyx/graphql-php`, `graphql-request`), RESTful APIs, custom PHP
MVC frameworks, background jobs and
scheduled tasks
- **Frontend & UI:**
Svelte and SvelteKit, React, Next.js,
Vite, Bootstrap 5, Tailwind CSS,
Chart.js, Sass
- **AI & Generative AI:**
Prompt engineering and context
optimization, Retrieval-Augmented
Generation (RAG), LLM APIs (OpenAI,
Anthropic/Claude, Google Gemini),
agentic workflows and multi-step AI
automation, local LLM deployment and
operation (Ollama, llama.cpp), image
generation (Stable Diffusion, Flux, Z-
Image, Qwen), ComfyUI workflows,
audio processing (Whisper STT, Piper
TTS), GitHub Copilot integration, AI-
assisted code generation and review
- **Data, Search & Analytics:**
MySQL / MariaDB (including Percona /
XtraDB Cluster), ClickHouse, SQLite,
data warehousing, OLAP, reporting,
Apache Solr (search and typeahead)
- **DevOps, Cloud & Infrastructure:**
Docker, docker-compose, Kubernetes
(basic), Hetzner Cloud (`hcloud`, `cloud-init`), Nginx, Apache, PHP-FPM, Git,
GitLab, Jenkins, Ansible
- **Deployment & Resilience Patterns:**
Blue-green deployments, timestamped
releases, zero-downtime rollouts, Nginx
ingress setups, health checks and
rollback strategies
- **Testing & Quality:**
PHPUnit, Jest, Playwright, static
analysis (PHP CodeSniffer), automated
tests, CI/CD pipelines, code reviews
- **Monitoring & Observability:**
Nagios Core, NRPE, custom Nagios
plugins (web, HAProxy, DNS/SSL, RAID
checks)
- **Security & Authentication:**
HTTPS/TLS, CSRF protection, API keys,
HMAC-based webhook signatures,
role-based access control, session
management
- **Automation, Crawling & E2E:**
Chrome DevTools Protocol / headless
Chrome, Chrome Remote Interface,
Appium, WebdriverIO, Android
Emulator, crawler- and cron-based job
orchestration
- **Media, Assets & Delivery:**
Image pipelines with ImageMagick,
`jpegoptim`, `pngquant`, CDN integration,
content-addressed storage, Nginx X-
Accel-Redirect
- **Messaging, CRM & External APIs:**
HubSpot API, WhatsApp Business
Cloud API, Mailgun / Mailjet, Instagram
/ Facebook APIs, Google Maps APIs,
Mapbox, Google AdWords API
- **Tools & Environments:**
PhpStorm, VS Code, Eclipse,
Composer, npm, Yarn, Bash, Linux,
macOS