

Kyrylo Kholodenko

Python Engineer

Lviv, Ukraine · Remote · UTC+2/+3, full EU overlap · English B2

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SUMMARY

Python engineer with 6+ years in production: Django services, third-party integrations, crawling and data pipelines for EdTech and Ukrainian public-sector platforms. Tech or dev lead on four client builds, from discovery calls and estimates to release. 13 pull requests merged into Open edX core. Works daily with AI agents (Claude Code, MCP).

SKILLS

Backend	Python, Django, Django REST Framework, Celery, FastAPI, PostgreSQL, MySQL, Redis, pytest
Integrations	Event bus (Redis Streams, openedx-events), REST & webhooks, OAuth2 / OIDC, SAML, SCIM 2.0, LTI 1.3
Crawling	Playwright, curl_cffi, httpx, Selenium, RabbitMQ, anti-bot diagnosis
Data & AI	ClickHouse, dbt, Superset, xAPI, pgvector, OpenAI API, data migrations
Cloud & delivery	AWS, Azure, Docker, Kubernetes (k3s), GitLab CI, Grafana · Loki · Prometheus
Working knowledge	AWS S3 · Athena · Glue, Airflow, Pandas · Polars, Terraform, React + TypeScript

EXPERIENCE

Lead Engineer · Raccoon Gang (Open edX vendor) Jan 2024 – present

- Tech or dev lead on four client builds; presales lead on a ~100k-learner tender; mentor and technical interviewer.
- AI competency assessment for a national teacher-development NGO (tech lead): semantic matching on OpenAI embeddings in pgvector, LLM-written conclusions moved to a smaller model to cut cost. Live since Nov 2025.
- Enterprise cybersecurity learning hub: OIDC single sign-on with the client portal; catalogue and progress sync for ~3,000 labs under strict API limits, where connection pooling cut p90 latency from 19 s to 0.56 s.
- Government workforce-training control plane: cohorts reconciled against the LMS (drift detection, retries), runtime-defined roles and permissions, 7 ADRs.
- Cohort learning with zero core patches (tech lead, 3 engineers): 11 features in a fixed hour cap; found and fixed a grading defect that left 442 learners at 0% and 96 certificates unissued.
- Learning analytics on five client platforms: xAPI events into ClickHouse, dbt models, Superset dashboards refreshed every 15 minutes.

Python Engineer, crawling team · Brand-protection & anti-piracy company (outstaff) 2025 – present

- Keep a few hundred bots unblocked across marketplaces, social networks and piracy sites (millions of crawls a day): Cloudflare, Akamai, proof-of-work challenges, TLS fingerprinting, geo-blocking, captchas.
- Fix blocks in the shared framework, not single bots: one library fix covered ~18 country bots; a page-ownership contract for every Playwright bot.

Full-stack Developer · Raccoon Gang (joined as Python Developer) Jul 2021 – Jan 2024

- Django and React across a dozen client platforms; backup tech lead on the largest build.
- Digital badges for Open edX core: Credly and Accredible through one provider interface, new platform events and an event-bus consumer, W3C Verifiable Credentials issuance. 7.5k lines merged upstream.
- Physician-education platform (DACH): migrated 12,378 users and 237 courses from a legacy LMS through a resumable pipeline under a 30 req / 10 s limit; client logic in a separate Django service over a Redis event bus.
- SCIM 2.0 user provisioning, ORCID-only sign-in, course import and export pages contributed upstream in React.

Software Engineer · Freelance (remote) Feb 2020 – Jul 2021

- Web apps and scrapers for small clients: Python (Django, FastAPI) and ASP.NET Core; crawling with Selenium and Scrapy.

OPEN SOURCE

13 pull requests merged into Open edX (credentials, openedx-events, openedx-platform, edx-when, frontend-app-authoring), including the 7.5k-line badges feature. github.com/kyrylo-kh

EDUCATION		LANGUAGES
Master's, Engineering and Programming of Infocommunication Systems National Aerospace University "Kharkiv Aviation Institute"	2024 – 2025	Ukrainian — Native English — B2
Bachelor's, Engineering and Programming of Infocommunication Systems National Aerospace University "Kharkiv Aviation Institute"	2020 – 2024	