Andrii Smidonov

Python Engineer | AI Expertise

✉ yuko.terraf@gmail.com   📞 +380972276935   📍 Kyiv, Kyiv City, Ukraine

in https://www.linkedin.com/in/andrii-smidonov/

SUMMARY

I'm a Python Backend & AI Engineer with a strong focus on building scalable data-driven systems and modern LLM-based applications. Over the past years, I've grown from classical backend development to designing full-stack AI architectures, multi-agent systems, and high-performance data pipelines.

I specialize in:

- LLM systems & multi-agent architectures (OpenAI Agents SDK, LangGraph)
- Data pipelines & ETL (Cube.js → Python → Supabase/Postgres)
- Vector search & retrieval (Qdrant, embeddings, clustering)
- Production backend engineering (FastAPI, async services, RPCs, task queues etc.)
- Cloud deployments (GCP, Docker)
- High-quality SQL modeling (materialized views, performance tuning etc.)

Recent Work Highlights

- Designed and implemented core components of a multi-agent AI platform for sustainability, carbon, water, and climate analytics. (v1 - which was POC and v2 - stable and performant product)
- Built facility-level data models and scalable ETL pipelines integrating multiple data systems.
- Developed vector-based retrieval and reasoning workflows to power advanced AI decision-making.
- Built monitoring and metrics for LLM performance, reasoning quality, and user insights.
- Deployed production-ready AI and backend services in a fully cloud- native environment.

I'm passionate about AI engineering, data architecture, and building intelligent systems that combine automation, reasoning, and large- scale analytics. Always open to learning new technologies and tackling complex engineering challenges.

EXPERIENCE

Python AI Engineer   04/2025 – Present
earthena ai   Kyiv City, Ukraine

- Designing and implementing the architecture of a multi-agent LLM systemusing OpenAI Agents SDK and LangGraph.
- Building Python data pipelines syncing databases, including materialized views, RPC functions, and optimized SQL layers.
- Developing facility-level sustainability data models (energy, carbon, water, climate risk) and setting up scalable ETL processes.
- Implementing vector search and retrieval workflows with Qdrant, including embeddings pipelines, payload schemas, and clustering logic.
- Optimizing reasoning flows, LLM performance, and system reliability across the multi-agent ecosystem.
- Creating monitoring and analytics for agent quality, user insights, and system performance.
- Deploying production-ready services using GCP Cloud Run, Cloud Build, and Supabase infrastructure.

Python Developer   06/2024 – 03/2025
Perfsol   Kyiv City, Ukraine

- **Transportation Management Platform:**
Developed using Django, this platform streamlined material logistics.

My primary responsibilities included debugging and implementing new features, notably expanding the system from exclusively managing trucks to incorporating other modes of transport such as ships.

- **Real Estate Platform:**
Designed for realtors and individuals looking to rent or purchase properties, I developed key functionalities including secure email-based login with verification, user onboarding, and the creation and configuration of property listings.
All of this was built with multi-tenancy in mind to support diverse user groups seamlessly.

- **CRM System:**
I focused on enhancing system reliability by identifying and fixing existing bugs, ensuring smooth performance for end-users.

Python Engineer
Join.To.IT

02/2025 – 02/2025
Kyiv City, Ukraine

- **Car Recommendation System:** Created a backend API solution that identifies the best vehicle for a user by leveraging advanced vector search techniques within an extensive vector database of cars.

- **Nutritional Analysis Tool:** Developed backend API for an image-based application that determines the calorie and macronutrient content of meals. This project was executed in two stages: first by identifying the dish, and then by extracting nutritional data efficiently.

Key technologies utilized include FastAPI, OpenAI, LangChain, and QDrant.

Python Mentor
Mate academy

05/2023 – 10/2024
Kyiv City, Ukraine

- Conducted technical check-ins (mock technical interviews) with students, providing feedback on their theoretical knowledge.
- Led Q&A sessions to help students solve issues and understand challenging topics.
- Facilitated live coding sessions to evaluate students' coding skills in real-time.
- Provided chat support by answering students' questions as they arose.
- Reviewed students' code submissions (similar to homework) to ensure adherence to best practices and quality standards.

Middle Python Developer
DataArt

04/2022 – 08/2024
Kyiv City, Ukraine

- Contributed to the development of an internal data platform, working with pure Python, Apache Avro, and GCP
- Helped maintain and expand FastAPI-based internal APIs for smoother collaboration with the analytics team
- Developed an automation tool for validating Confluence pages, improving documentation consistency and visibility
- Integrated with the Confluence API to fetch and verify content and metadata of internal documentation
- Used SQLAlchemy with PostgreSQL to store validation results and page states
- Implemented scheduled validation tasks with APScheduler for regular checks and automated updates

Junior Python Developer
DataArt

09/2021 – 04/2022
Kyiv City, Ukraine

- Took part in building a scalable internal data platform for data processing and analytics
- Worked with pure Python to implement core data processing logic
- Used Apache Avro format for efficient serialization and schema management
- Deployed and managed components on Google Cloud Platform (GCP)
- Built internal APIs with FastAPI to streamline communication between backend services and the analytics team

Python Trainee
DataArt

06/2021 – 08/2021
Kyiv City, Ukraine

Designed and developed a web service for communication between students and teachers Implemented features such as homework tracking, class schedule management, and notifications Django + Celery +Telegram Bot API webhooks via FastAPI

Python Developer 08/2022 – 06/2024
Logika School Kyiv City, Ukraine
Developing web platform to collect and visualise statistics for the school.

Methodologist 07/2020 – 06/2021
Logika School Kyiv City, Ukraine
- Make changes and edit the Python programming course.
- Providing technical support for equipment failure.
- Conducting individual lessons in Python programming.
- Development of an algorithm for multi-user Telegram-bot to track the amount of virtual currency of students, as well as information support for school users.
- Preparation of teachers for lessons, as well as training for teachers.
- Organization and control of the work process of more than 30 teachers remotely in Vinnytsia and Kyiv regions.

Python teacher 12/2019 – 05/2024
Logika School Kyiv City, Ukraine
I teach Python programming to students aged 10 to 14. Together, we explore the fundamentals of Python, diving into both its core concepts and the underlying mechanisms of how it works. My teaching plan is designed to be comprehensive yet engaging, covering:
- General Python Knowledge: All the basics to build a solid foundation.
- GUI Development: Using PyQT5 to create interactive applications.
- Game Development: Leveraging PyGame for creative and fun projects.
- Machine Learning Introduction: A primer with PyTorch, along with a brief look at Tensor, ML, and AI concepts.
- Scientific Computing: Exploring advanced calculations and data processing with SciPy.
- Web Development: Building dynamic web applications using Flask.
- Mobile App Development: Creating applications with Kivy.
- Creative Coding: Using Turtle and a bit of TKinter to add a fun twist to our learning.

TOP SKILLS

- Python
- FastAPI
- LangGraph
- RAG
- SQL
- OpenAI Agents SDK
- Google Cloud Platform (GCP)

EDUCATION

Bachelor's degree, Special techical security of information 2017 – 2021
National Technical University of Ukraine 'Kyiv Polytechnic Institute'

CERTIFICATIONS

- PCEP – Certified Entry-Level Python Programmer
- Problem Solving (Basic)
- Python Data Structures
- Python (Basic)
- Programming for Everybody (Getting Started with Python)