Vitaliy S.
Architect/Team-lead Team Lead | Back-End Developer

SUMMARY

- Engineer with 6+ years leading backend development and architecture of AI-driven microservice platforms in fintech, e-commerce, and digital content.
- Expert in Python, FastAPI, Django, event sourcing, and cloud-native solutions (AWS, GCP, Kubernetes), delivering scalable, real-time data processing systems.
- Proficient in SQL/NoSQL databases, messaging queues (Kafka, RabbitMQ), containerization (Docker), CI/CD pipelines, and API integrations.
- Skilled in agile methodologies, code quality enforcement, mentoring, and end-to-end project delivery of complex AI and fintech applications.

TECHNICAL SKILLS

Main Technical Skills	Python (6 yr.), FastAPI (6 yr.), Django REST framework, SQLAlchemy, Docker
Programming Languages	Python (6 yr.)
Mobile Frameworks and Libraries	Crashlytics
Python Frameworks	Django REST framework, FastAPI (6 yr.), Flask
AI & Machine Learning	LangChain, n8n, OpenAI (4 yr.), Spacy
Python Libraries and Tools	pytest
Data Analysis and Visualization Technologies	ETL
Databases & Management Systems / ORM	DBeaver, Microsoft SQL Server, MongoDB, Neo4j, NoSQL, SQLAlchemy
Industry Domain Experience	Banking
Version Control	BitBucket, Git, Github Actions
Message/Queue/Task Brokers	Celery, Kafka, RabbitMQ
Deployment, CI/CD & Administration	Dapr, GitLab CI
Virtualization, Containers and Orchestration	Docker, Kubernetes

SDK / API and Integrations	FastAPI (6 yr.), OAuth, Stripe
Methodologies, Paradigms and Patterns	FDD, Kanban
Third Party Tools / IDEs / SDK / Services	Microsoft Visual Studio Code, PyCharm
Web/App Servers, Middleware	Nginx
QA, Test Automation, Security	Postman, pytest, Selenium, Unit Testing
Logging and Monitoring	Prometheus, Sentry
Mail / Network Protocols / Data transfer	WebSockets
Other Technical Skills	Stable Diffusion

WORK EXPERIENCE

Back-End Developer (Aively)

Duration: 0.5 years
Summary:

- An AI-driven platform that enables users to train custom visual styles or characters in minutes and generate unlimited designs
- The platform allows creators to remix and build upon each other's work, with automated royalty distribution across multiple contributors
- Users can instantly transform their creations into physical products through an integrated print-on-demand system, with built-in fulfillment and secure payments
- The project focuses on empowering artists and creators to monetize their visual identity with minimal technical effort

Responsibilities:

- Designed and implemented the overall system architecture for a scalable AI-driven creative platform;
- Built the backend from scratch, ensuring high performance, scalability, and reliability;
- Developed and maintained integrations with third-party APIs (AI services, payments, print-on-demand, etc.);
- Established efficient communication layers between frontend, backend, and AI/ML components;
- Designed APIs and data flows to support real-time design generation and publishing workflows;
- Implemented robust error handling, logging, and monitoring for production stability.

Technologies: Python, FastAPI, OpenAI, Stripe, WebSockets, Anthropic API, PostgreSQL, Redis, Render, Runpod, Docker, SQLAlchemy, Celery, Sentry, Printful, GCP Buckets/CDN, AWS Rekognition

Team Lead | Back-End/AI Developer (Digital Content Ecosystem)

Duration: 2 years
Summary:

- Developed an integrated content ecosystem that automatically collects, analyzes, and generates content from multiple digital platforms
- The platform includes content extraction services, AI-powered content generation, knowledge graph analysis, and trend identification capabilities, enabling users to discover content relationships and generate new content based on trending topics

Responsibilities:

- Creating system architecture;
- Designed and implemented microservice architecture for content collection and processing;
- Developed content extraction API for YouTube, Reddit, and news articles;
- Created AI-powered content generation system using OpenAI APIs;
- Built knowledge graph generation pipeline for entity and relationship extraction;
- Implemented workflow management system for content processing;
- Deployed services to Google Cloud using Docker containers;
- Conducted code reviews and mentored junior developers;
- Created comprehensive API documentation.

Technologies: Python, FastAPI, SQLAlchemy, Neo4j, OpenAI, LangChain, Firebase, Google Cloud, PostgreSQL, Redis, Websockets, SERP, ZYTE, RapidAPI, Cloud Run Run/Job/Function

Team Lead | Back-End Developer (Mental health chatbot)

Duration: 0.5 years
Summary:

- Chatbot designed to help people with mental health problems
- It consists of a well-trained large language model that is secure
- The bot can interact with users verbally and by text messages in real time, has memory of previous conversations, simulates natural conversation, and offers guided therapeutic exercises

Responsibilities:

- Lead the architecture and development of an application with real-time market data integration;
- Build scalable backend infrastructure to handle high-frequency data processing;
- Define and enforce coding guidelines, development best practices, and efficient workflows to maintain code quality;
- Prepare and maintain comprehensive technical documentation and project specifications;
- Identify and resolve bugs, while optimizing system performance;
- Review code contributions and provide mentorship to junior and mid-level developers.

Technologies: Python, FastAPI, SQLAlchemy, PostgreSQL, DynamoDB, S3, CloudFront, Docker, OAuth2, SNS /SQS, Lambda, RevenueCat, HLS, SQLAdmin, FFmpeg

Team Lead | Back-End/AI Developer - European digital services company (AI-Powered Web Ecosystem & Fintech Solutions)

Duration: 2 years
Summary:

- Led the end-to-end development of several interconnected platforms including a high-load business information portal dynamically generating over 15 million pages, an AI-driven platform for automated website creation, and a mobile-first fintech application with real-time trading functionality, portfolio tracking, and multilingual investor communities
- The projects focused on scalable delivery, automation, and seamless user experience

Responsibilities:

- Architect and oversee the development of a mobile trading platform with real-time market data integration;
- Design scalable backend systems capable of processing high-frequency financial data streams;
- Establish coding standards, best practices, and development workflows for consistent high-quality code;
- Project documentation and technical specifications;
- Bug fixing and performance optimization;
- Code review and mentoring junior/middle developers.

Technologies: Python, FastAPI, OpenAI, Stable Diffusion, Stripe, WebSockets, Anthropic API, Langchain, Google Search Console, PostgreSQL, Redis, Auth0, OVH, Postman, Prometheus/Grafana, Docker, SQLAlchemy, Celery, Polygon API, Sentry

Lead Back-End Developer (AI platform for automation of FinTech processes)

Duration: 1.5 years
Summary:

- AI platform based on microservice architecture for automating document processing in a banking structure with artificial intelligence
- The platform automates various banking processes such as seizing property, lending, and investing, speeding up work processes, reducing human error, and enabling faster application processing with fewer employees

Responsibilities:

- Creating project architecture;
- Implementing new backend features;
- Refactoring existing backend code;
- API integrations;
- Development of microservices;
- Adopting event sourcing for document processing;
- Writing documentation;
- Testing and debugging;
- Code review.

Technologies: Python, FastAPI, PostgreSQL, MongoDB, Redis, Dapr, Docker, PyTest, Nginx, GitHub Actions, FastAPI-Amis-Admin, Kubernetes (k8s), Pycaret, SentenceTransformers, AutoGluon, Spacy, Trankit, N8N, Grafana, Prometheus

EDUCATION

- **Master's degree**
  Chernihiv National University of Technology, Chernihiv, Computer Science
- **Bachelor's degree**
  Chernihiv National University of Technology, Computer Science

CERTIFICATION

- **Online Kubernetes Lab**
- **KodeKlaud CTO Course**
  CTO Academy
- **Mastering the System Design Interview**
  Udemy
- **Django Pro**
  Hillel IT school, Odesa
- **Python Advanced**
  Hillel IT school, Odesa