

Vitaliy S.

Team Lead | Back-End Developer

Summary of Qualifications

Team Lead and Backend Developer with 6 years of experience in architecting and managing scalable, AI-driven microservice platforms across web automation, fintech, and digital content domains. Expertise in guiding development teams, defining coding standards, and delivering complex systems with real-time data processing and AI integration.

Proficient in Python and modern backend frameworks (FastAPI, Django), software architecture, event sourcing, and cloud-native solutions. Successfully led projects including automated website generation platforms, AI-powered fintech trading apps, and mental health chatbots, ensuring high-quality code, thorough documentation, and efficient workflows.

Strong background in SQL/NoSQL databases, messaging queues (Kafka, RabbitMQ), containerization (Docker), CI/CD pipelines, and cloud providers (AWS, GCP). Skilled in agile methodologies, mentoring developers, and driving end-to-end project delivery.

Skills

Programming Languages/Technologies

- Software Architecture Design/Reverse Engineering/Design Patterns
- Technical Documentation/Architecture Reports
- MSA/SOA
- Event-Sourcing/Saga/Orchestration/Choreography
- XML/JSON/YAML
- Python
- HTML/CSS
- SQL/NoSQL
- WebSockets
- Kafka/RabbitMQ/Celery
- Elasticsearch
- Dapr

RDBMS

- MySQL
- PostgreSQL
- MS SQL Server

NoSQL

- Redis
- MongoDB
- DynamoDB

Containerization Docker

- Kubernetes (k8s)

Methodologies

- Agile, Scrum, Kanban
- Pair Programming
- Feature Driven, Behavior Driven Development
- Waterfall

Operating Systems

- Microsoft Windows
- Debian/Ubuntu/Linux
- macOS

Frameworks/Libraries

- FastAPI
- Django/DRF
- Flask
- SQLAlchemy
- Numpy/Pandas
- Selenium/BS4/Playwright
- Tkinter
- PyQt
- FastAPI-Amis-Admin / SQLAlchemy
- SentenceTransformers / HF
- Pycaret/AutoGluon
- Pytorch
- Trankit/Spacy/NLTK
- N8N/Zapier/Make
- Prometheus/Grafana
- ELK
- Faststream
- Aiogram/python-telegram-bot

Application/Web Servers

- Nginx

Cloud Providers

- AWS/GCP
- OVH/Hetzner

Development Tools

- Visual Studio Code/Cursor
- PyCharm
- Another Redis Manager
- MongoDB Atlas
- TablePlus/DBeaver

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| | CI/CD <ul style="list-style-type: none"> ▪ Bitbucket CI/CD ▪ Jenkins ▪ GitHub Actions | Testing Tools <ul style="list-style-type: none"> ▪ Postman ▪ Pytest ▪ Selenium ▪ Unittest ▪ Sentry Versions Control <ul style="list-style-type: none"> ▪ Git ▪ GitHub ▪ GitLab ▪ BitBucket |
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| Experience | |
| Project Description: | Digital Content Ecosystem 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. |
| Domain: | AI & ML Digital Media |
| Involvement Duration: | 1 year |
| Project Role: | Team Lead Back-End/AI Developer |
| Responsibilities: | <ul style="list-style-type: none"> ▪ 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. |
| Project Team Size: | 3-4 team members |
| Tools & Technologies: | Python, FastAPI, SQLAlchemy, Neo4j, OpenAI, LangChain, Firebase, Google Cloud, PostgreSQL, Redis, Websockets, SERP, ZYTE, RapidAPI, Cloud Run Run/Job/Function. |
| Project Description: | Mental health chatbot Chatbot is designed to help people with their mental problems. It consists of a well-trained LLM model that is totally secure. The bot can interact with users verbally and by text messages in real time. It has memory with previous conversations. It can simulate natural conversation and offer guided therapeutic exercises. |
| Domain: | AI & ML Mental health |
| Involvement Duration: | 0.5 years |
| Project Role: | Team Lead Back-End Developer |
| Responsibilities: | <ul style="list-style-type: none"> ▪ 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; |

Project Team Size:

3-4 team members

Tools & Technologies:

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

Project Description:**AI-Powered Web Ecosystem & Fintech Solutions**

Led the end-to-end development of several interconnected platforms for European digital services company, working in parallel across web, data, and fintech domains. The first project was a high-load business information portal that dynamically generated over 15 million pages, offering detailed data on European companies and their directors. The system required efficient data aggregation, processing, and scalable delivery.

Simultaneously, led the development of an AI-driven platform for automated website creation. The solution enabled users to build and manage professional websites through a single interface, featuring intelligent layout generation, integrated e-commerce, domain registration, and custom email services.

In parallel, designed and implemented a mobile-first fintech application with real-time trading functionality, portfolio tracking, and multilingual investor communities. The app was built on a modular microservices architecture (backend, finance, chat) to ensure performance, scalability, and seamless user experience.

Across all projects, was responsible for system architecture, team coordination, and delivery of robust, production-ready solutions with a strong focus on automation, performance, and maintainability.

Domain:

Web development

Involvement Duration:

2 years

Project Role:

Team Lead | Back-End/AI Developer

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.

Project Team Size:

8-9 team members

Tools & 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.

Project Description:**AI platform for automation of FinTech processes**

AI platform based on microservice architecture for automating document processing in a banking structure with the help of artificial intelligence. The platform allows you to automate various banking processes, such as seizing property, lending, and investing. Automation of document processing allows you to speed up the work process, removes the likelihood of human error, allows you to process applications faster, while involving fewer employees.

Domains:

AI & Machine Learning | FinTech

Involvement Duration:

1 year

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| Project Role: | Lead Back-End Developer |
| Responsibilities: | <ul style="list-style-type: none"> ▪ Creating project architecture; ▪ Implementing new BE features; ▪ Refactoring existing backend code; ▪ API integrations; ▪ Development of microservices; ▪ Adopting event sourcing for document processing; ▪ Write documentation; ▪ Testing and debugging; ▪ Code review |
| Project Team Size: | 5-8 team members |
| Tools & 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. |
| Project Description: | <p>Advanced predictive app for competitive sporting events</p> <p>Development of the instrument for predicting sporting events. Technologies are engineered with custom-built advanced statistical models, proprietary algorithms, and best-in-class real time data processing. The project portfolio includes offline algorithms that predict full match results and online algorithms that are fed with a live data stream of match events and update their predictions in real-time.</p> |
| Domain: | Data E-sport |
| Involvement Duration: | 1.5 years |
| Project Role: | Back-End Developer |
| Responsibilities: | <ul style="list-style-type: none"> ▪ Improving system architecture; ▪ Implementing new features; ▪ API integrations; ▪ Application deployment; ▪ Fix bugs; ▪ Unit testing; ▪ Code refactoring; ▪ DB structure optimization; ▪ Code review. |
| Project Team Size: | 7-10 team members |
| Tools & Technologies: | Python, FastAPI, MySQL, WebSockets, Prometheus, Grafana, Redis, ElasticCloud, Docker, AWS. |

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| Certificates | Online Kubernetes Lab KodeKloud |  KodeKloud |
| | CTO Course CTO Academy |  |
| | Mastering the System Design Interview Udemy |  |
| | Django Pro Hillel IT school, Odesa |  |
| | Python Advanced Hillel IT school, Odesa |  |

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| Education | Master's degree Chernihiv National University of Technology, Chernihiv Computer Science |
| | Bachelor's degree Chernihiv National University of Technology Computer Science |
| Languages | English: Advanced |
| | Ukrainian: Native |
| | Russian: Native |