

Dmytro H.

Full Stack / AI Developer

Summary of Qualifications

I am a Full Stack / AI Developer with 3.5 years of experience in designing and developing scalable server-side architectures, AI-powered solutions, and full-stack applications. My expertise includes Python (FastAPI, Django), JavaScript/TypeScript (React, Vue.js), and cloud platforms (AWS). I have a strong background in AI/ML model integration, data processing pipelines, and automation systems (e.g., CAD design automation).

I am skilled in building high-performance APIs, implementing CI/CD workflows, and optimizing databases (SQL & NoSQL). My experience covers asynchronous programming, microservices. I'm passionate about delivering robust, production-ready solutions, conducting code reviews, and leading technical improvements across projects.

Skills

Programming Languages/Technologies

- Asynchronous Programming
- Technical Documentation/Architecture Reports
- XML/JSON/YAML
- Python
- JavaScript/TypeScript

RDBMS

- MySQL
- PostgreSQL
- Alembic
- MSSQL

NoSQL

- Redis

Virtualization Tools

- Docker / Docker Compose

Methodologies

- Agile, Scrum, Kanban
- Pair Programming

Operating Systems

- Microsoft Windows
- Debian/Ubuntu/ Arch/Linux

CI/CD

- GitHub CI/CD
- GitHub Actions

Versions Control

- Git
- GitHub
- GitLab
- BitBucket

Frameworks/Libraries

- FastAPI
- Django/DRF
- SQLAlchemy
- React
- Vue.js
- Numpy/Pandas
- Requests
- Aiohttp
- Matplotlib
- Selenium
- BeautifulSoup
- boto 3
- LlamaIndex
- Whisper
- Faster Whisper
- MCP Server Connectors
- ElevenLabs
- Telegram API
- Starlette
- Grafana
- Prometheus

Application/Web Servers

- Nginx

Cloud Providers

- AWS

Development Tools

- Visual Studio
- PyCharm

Testing Tools

- Postman
- Pytest
- Unittest, Mock

Experience

AI-driven backend system for automated content generation and workflow orchestration

Project Description: Developed a backend platform that automates data workflows and integrates AI modules for intelligent content generation. The system focuses on efficient backend architecture, combining API-driven automation with AI-powered NLP and image-processing tools to enhance content creation and streamline operations.

Domain: Software Development | AI Integration | Automation

Involvement Duration: 1 year

Project Role: Back-End Developer

Responsibilities:

- Designed and implemented RESTful APIs using FastAPI;
- Developed modular backend services for authentication, data processing, and AI integration;
- Integrated AI components for NLP-based content generation and background processing;
- Built database layer and optimized SQL queries using SQLAlchemy and PostgreSQL;
- Implemented asynchronous task execution and service communication;
- Integrated external APIs, third-party services, and payment systems;
- Maintained codebase quality with unit tests, CI/CD pipelines, and documentation;
- Participated in system architecture design and optimization.

Project Team Size: 6-8 team members

Tools & Technologies: Python (FastAPI), SQLAlchemy, PostgreSQL, Pydantic, Docker, Celery, Redis, Pandas, OpenAI API, GitHub Actions.

AI system for automating design processes and generating design documentation

Project Description: Developed an AI-powered system to automate engineering design workflows, including the creation of 3D assemblies and technical documentation. The core feature involved building a machine learning model capable of automatically constructing a 3D assembly from a list of components, significantly reducing manual design time and minimizing errors.

Domain: AI/ML | CAD Automation | Engineering Design

Involvement Duration: 1.5 year

Project Role: Full Stack Developer

Responsibilities:

- Designed and maintained backend architecture for data processing and AI module integration;
- Built end-to-end data processing workflows and integrated machine learning models into production environments;
- Developed APIs for seamless interaction between external CAD/PLM systems and frontend applications;
- Implemented responsive web interfaces and internal dashboards using React/TypeScript for visualizing data, AI outputs, and configuration tools;
- Created web-based tools for generating and managing technical and design documentation;
- Performed data preprocessing, model optimization, and service configuration for 3D structure processing;
- Set up and maintained unit tests, automated build pipelines, and deployment processes (CI/CD).

Project Team Size: 8-10 team members

Tools & Technologies: Python (FastAPI), TypeScript, React, Pandas, Tensorflow, AWS EC2, Docker, PostgreSQL

Project Description:	Clarity Health Solutions	
	The company specializes in providing solutions in the healthcare sector. They offer tools for monitoring medical service costs and help companies understand pricing for healthcare services. The main goal is to ensure transparency in the healthcare system, allowing employers to manage expenses for their employee health programs more effectively.	
	Domain:	AI & ML Healthcare
	Involvement Duration:	1 year
	Project Role:	Back-End Developer
Responsibilities:	▪ Developed and maintained web scraping pipelines for extracting structured and unstructured data from various online sources; ▪ Implemented document parsing workflows for PDFs, Word files, scanned documents, and technical specifications; ▪ Performed data cleaning, normalization, and transformation to ensure consistency and quality across datasets; ▪ Conducted exploratory data analysis to identify patterns, validate data integrity, and support decision-making; ▪ Created automation scripts and custom tools to streamline data collection and processing tasks; ▪ Designed and built a custom document parsing framework adaptable to multiple formats and languages; ▪ Produced and maintained clear technical documentation for scraping workflows, configurations, and data schemas; ▪ Wrote automated tests and performed manual validation to ensure scraping accuracy and reliability; ▪ Implemented robust error handling, logging, and monitoring to support stable production performance.	
Project Team Size:	10-15 team members	
Tools & Technologies:	Python, BS4, Selenium, Numpy/Pandas, boto3, FastAPI, Jinja2, PyTest, Pydantic, SQLAlchemy.	

Certificates	Python Pro Hillel	
	React Hillel	
	Front-end Pro Hillel	

Education	Bachelor's degree in Cybersecurity National university "Odesa Polytechnic"
	Master's degree in Cybersecurity and information protection National university "Odesa Polytechnic"
Languages	English – Advanced Ukrainian – Native Russian – Native