

# Mark Z.

## Back-End Developer

### Summary of Qualifications

I'm a Back-End software developer with 4 years of proven professional experience. Have an understanding of software engineering and architecture, OOP principles, numerical methods, discrete math, DBMS, software design, and web programming.

The main technologies I have used in my previous projects were Python, SQL, NoSQL, and AWS.

My personal qualities – are responsibility, reliability, and trust, the ability to work in a team and individually, attention to details, and constant learning of new things. My mind is always open.

### Skills

#### Programming Languages/Technologies

- Software Architecture Design/Reverse Engineering/Design Patterns
- Technical Documentation /Proposals
- XML/JSON/YAML
- Python
- HTML/CSS
- SQL
- GoLang
- WebSocket

#### RDBMS

- PostgreSQL
- SQLite
- MSSQL

#### NoSQL

- Neo4j
- Redis

#### Virtualization Tools

- Docker

#### Methodologies

- Agile, Scrum, Kanban
- Pair Programming
- Waterfall

#### Operating Systems

- MacOS

#### Message broker

- AWS SQS

#### Frameworks/Libraries

- FastAPI
- Django/DRF/DjangoORM
- SQLAlchemy
- Numpy/Pandas
- bs4
- boto3
- Celery
- Elasticsearch
- Alembic
- Requests
- AIOHTTP
- Langfuse
- Presidio
- Minio
- Docling
- Gotenberg

#### Application/Web Servers

- Nginx
- Uvicorn/Gunicorn

#### Cloud Providers

- AWS

#### Development Tools

- PyCharm

#### Testing Tools

- Postman
- Pytest
- Unittest, Mock

#### CI/CD

- GitHub CI/CD
- GitHub Actions

#### Versions Control

- Git
- GitLab
- GitHub

## Experience

### Project Description:

#### RAG application

The application which is built on AI-powered approach that enhances text generation by retrieving relevant data from external sources before generating responses. Instead of relying solely on a language model's pre-trained knowledge, RAG dynamically pulls real-time information, improving accuracy and relevance.

### Domain:

AI & ML

### Involvement Duration:

1 year

### Project Role:

Back-End Developer

### Responsibilities:

- Back-End development;
- Implementing new BE features;
- Refactoring existing back-end code;
- API integrations;
- Working with vector database (testing and configuring indexing process);
- File processing (split documents into chunks, extract tables, images, get text descriptions of sources, store Langchain documents in vector DB);
- Adopting event sourcing for document processing;
- Add metrics (Langfuse);
- Fixing bugs;
- Unit testing;
- Code review.

### Project Team Size:

10-13 team members

### Tools & Technologies:

Python, FastApi, SQLmodel, Langfuse (GPT, Azure, Bedrock, etc), Anonymizers (Presidio), Minio, Docling, Weaviate, Gotenberg, Flowise, Docker Compose, Docker.

#### European information page

### Project Description:

Infocheck is information page where a person can find all the necessary information about a particular European company or the person who manages it. The information page has about 15 million pages.

### Domains:

Web development

### Involvement Duration:

1.5 years

### Project Role:

Back-End Developer

### Responsibilities:

- Back-end development;
- Improve system architecture;
- Code base refactoring;
- Implementing new features;
- API integrations;
- Fixing bugs;
- Code review.

### Project Team Size:

3-5 team members

### Tools & Technologies:

Python, FastAPI, Jinja2, Weasyprint, Asyncio, PostgreSQL, Aiohttp, Elasticsearch, Docker.

#### AI-Security Platform

### Project Description:

A tool for finding scammers in the blockchain empowers security and risk teams to automatically detect and respond to attacks in real time. The software is searching for hackers or attacks in the blockchain using ML algorithms.

### Domains:

AI & Machine Learning

### Involvement Duration:

1.5 years

### Project Role:

Back End Developer

### Responsibilities:

- Python Back-End Development;
- Preparing technical specification;

<b>Project Team Size:</b>	7-10 team members
<b>Tools &amp; Technologies:</b>	<ul style="list-style-type: none"> <li>▪ Code development;</li> <li>▪ Development build and deployment scripts;</li> <li>▪ Fixing bugs;</li> <li>▪ Unit testing;</li> <li>▪ Code review.</li> <li>▪ DB structure optimization.</li> </ul> <p>Python, FastAPI, Neo4j, Redis, PostgreSQL, Alembic, SQLAlchemy, Pandas, boto3, Websockets, AWS, Docker.</p>

<b>Certificates</b>	<p><b>FastAPI Masterclass</b> Udemy</p> 
	<p><b>Python Course</b> FoxmindEd</p> 
	<p><b>Build REST-APIs with DRF</b> Udemy</p> 
	<p><b>Python Django Web Course</b> Udemy</p> 
	<p><b>Python Immersion</b> Coursera</p> 
	<p><b>AWS Cloud Practitioner</b> AWS</p> 
	<p><b>Python Basics</b> Udemy</p> 
<b>Education</b>	<p><b>Bachelor's Degree in Computer Science</b> Lublin university of technology</p>
<b>Languages</b>	<p><b>English:</b> Advanced <b>Ukrainian:</b> Native</p>