Veronika B.
**AI/ML Engineer /
Chatbot Developer**

Summary of Qualifications	
	AI/ML Engineer and Back-End Developer with 3 years of experience designing scalable data-driven systems, modular multi-agent platforms, and LLM-powered conversational agents and chatbots. Proficient in building RESTful APIs with FastAPI and Pydantic, integrating SQL/NoSQL databases, and implementing asynchronous, production-grade back-end architectures. Skilled in machine learning, prompt engineering, and deploying solutions on AWS/GCP using Docker and CI/CD pipelines.

Skills

Programming Languages/Technologies

- SaaS/RIA Research & Development
- Asynchronous Programming
- Technical Documentation/Architecture Reports
- XML/JSON/YAML
- Python

RDBMS

- MySQL
- PostgreSQL
- Alembic

NoSQL

- Redis
- AWS DynamoDB

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

Frameworks/Libraries

- FastAPI
- Websockets
- SQLAlchemy
- Numpy/Pandas
- Requests
- Aiohttp
- Matplotlib
- LangChain
- LangGraph
- LlamaIndex
- Scikit-Learn
- NLTK, spaCy, stanza
- Whisper
- Faster Whisper
- XGBoost, LightGBM
- transformers, PyTorch, TRL
- MCP Server Connectors
- ElevenLabs
- Starlette

Cloud Providers

- AWS
- GCP

Development Tools

- Visual Studio
- PyCharm

Testing Tools

- Postman
- Pytest
- Unitest, Mock

Experience

AI-Powered Modular Workflow System

Project Description:	Designed and implemented a modular multi-agent workflow system capable of executing complex pipelines either through predefined plans or dynamic orchestration by an agent controller. Integrated the MCP library with server-side connectors for databases, file storages and external APIs, enabling agents to retrieve, store, and process data autonomously.
Domain:	AI & ML	Automation

Involvement Duration:	1.5 years
Project Role:	AI & ML Engineer | Back-End Developer
Responsibilities:	▪ Designed and implemented a multi-agent orchestration system supporting modular workflows; ▪ Integrated the MCP library with server-side connectors; ▪ Developed API endpoints and controller logic using FastAPI with Pydantic models for data validation and seamless orchestration; ▪ Connected agents to PostgreSQL and S3 for persistent storage and bespoke data scrapper for data enrichment; ▪ Integrated websockets foe real-time agent action observability.
Project Team Size:	3-5 team members
Tools & Technologies:	LlamaIndex, OpenAI, MCP, FastAPI, Websockets, Postgres, Pydantic, Docker.

Mental health chatbot

Project Description:	Chatbot is designed to help people with their mental problems. It consists of well-trained LLM model that is totally secure. The bot can interact with users verbally and by text messages in a 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:	1 year
Project Role:	AI & ML Engineer | Chatbot Developer
Responsibilities:	▪ Back-end development; ▪ Prompt engineering; ▪ Development of full-cycle streaming voice agent (speech-to-text, LLM, text-to-speech); ▪ Fine-tuning LLM model; ▪ Attach multi-layered memory to the LLM (buffer, summary, user profile).
Project Team Size:	3-4 team members
Tools & Technologies:	Python, FastAPI, Whisper, ElevenLabs, Llama, Langchain, AWS Bedrock, AWS Sagemaker, AWS DynamoDB, PostgreSQL, Docker.

AI system for automating the design processes and development of design documentation

Project Description:	Develop a machine learning model capable of building a 3D assembly from a list of parts.
Domains:	AI & Machine Learning
Involvement Durations:	0.5 years
Project Role:	Data Scientist | ML Engineer
Responsibilities:	▪ Input data analysis; ▪ Dataset creation; ▪ Feature analysis; ▪ ML architecture (model selection, tuning hyperparameters); ▪ Development of strict rules for validation and postprocessing.
Project Team Size:	1-2 team members
Tools & Technologies:	Pandas, Data analysis, sklearn, XGBoost.

Certificates	**Machine Learning** Projector Institute

	Grammarly CompLing Summer School Grammarly	

Education	**Bachelor's degree in Computational Linguistics** Taras Shevchenko National University of Kyiv

Languages	**English –** Advanced **Ukrainian –** Native