

# Platon H.

Back-End Developer/  
AI/ML Engineer

## Summary of Qualifications

Back-End Developer with 4 years of experience building scalable SaaS platforms and AI-powered systems used in real production. I specialize in Python and design backend architectures that handle high load, asynchronous workflows, and complex integrations reliably.

I actively work with modern AI tools and APIs such as OpenAI, Groq, LangChain, Whisper, ElevenLabs, Ollama, and RAG-based systems to build intelligent automation, voice agents, and LLM-driven features. My experience covers the full pipeline from data ingestion and context retrieval to real-time AI responses integrated into backend services.

I focus on clean architecture, performance, and maintainability, helping businesses turn AI ideas into stable and scalable backend solutions ready for production.

## Skills

### Programming Languages/Technologies

- Software Architecture Design/UML/Reverse Engineering/Design Patterns
- Technical Documentation/Architecture Reports/Proposals/SRS
- XML/JSON/YAML
- Python
- SQL

### AI/ML Tools & APIs

- OpenAI API
- Groq API
- LangChain
- Whisper
- ElevenLabs
- Ollama
- RAG
- NLTK

### RDBMS

- MySQL
- PostgreSQL
- SQLite

### NoSQL

- MongoDB
- Elasticsearch
- Redis

### Containerization Tools

- Docker
- Docker Compose

### Methodologies

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

### Frameworks/Libraries

- FastAPI
- Numpy/Pandas
- Playwright
- Alembic
- SQLAlchemy
- Selenium/ Playwright
- BeautifulSoup4
- SocketIO
- Aiohttp
- Jinja2
- Celery
- Aiosmtplib
- PyPDF/WeasyPrint
- PyVoIP

### Monitoring Tools

- Sentry

### Cloud Providers

- AWS
- Heroku

### Development Tools

- PyCharm

### Testing Tools/Libraries

- Postman
- PyTest
- Unittest, Mock

### CI/CD



- GitHub Actions


### Versions Control

- GitHub
- GitLab

| Experience   |  |
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| <p><b>Project Description:</b></p> <p><b>Domains:</b></p> <p><b>Involvement Duration:</b></p> <p><b>Project Role:</b></p> <p><b>Responsibilities:</b></p> <p><b>Project Team Size:</b></p> <p><b>Tools &amp; Technologies:</b></p> | <p><b>AI Voice Agent: Automated voice verification platform</b></p> <p>An automated voice verification platform that uses AI-powered phone calls to verify contact information at scale. The system autonomously handles outbound VoIP calls, navigates IVR menus, processes voicemails, and conducts natural conversations to verify whether contact details are accurate or have changed. A Retrieval-Augmented Generation (RAG) system dynamically retrieves relevant context during live calls, enabling adaptive conversation flow based on real-time scenarios. The platform supports bulk call processing with worker scaling for high-volume verification campaigns.</p> <p>AI/ML   VoIP   Telephony Automation   Lead Verification</p> <p>1 year</p> <p>Back-End Developer   AI/ML Engineer</p> <ul style="list-style-type: none"> <li>▪ Architected and developed complete backend infrastructure with FastAPI REST APIs, admin panel endpoints, and Celery workers for asynchronous VoIP call processing;</li> <li>▪ Implemented end-to-end VoIP integration with Asterisk via SIP/RTP protocol, including authentication, call initialization, audio streaming, and DTMF signal handling;</li> <li>▪ Built AI-powered conversation pipeline integrating Voice Activity Detection (VAD), Whisper for speech-to-text, LLM via Groq API for response generation, and ElevenLabs for text-to-speech;</li> <li>▪ Built Retrieval-Augmented Generation (RAG) system using pgvector to fetch context-specific instructions during live calls;</li> <li>▪ Developed intelligent call scenario handling for IVR navigation, voicemail detection, and live human interaction;</li> <li>▪ Implemented conversation transcript tracking and automated outcome analysis with intelligent status classification;</li> <li>▪ Designed PostgreSQL database schema with encryption for sensitive contact data, using SQLAlchemy ORM and Alembic migrations;</li> <li>▪ Configured audio processing pipeline with ffmpeg and FunASR for real-time voice processing.</li> </ul> <p>6-7 team members</p> <p>Python (FastAPI), SQLAlchemy, Alembic, PostgreSQL, pgvector, Celery, Redis, Asterisk, Whisper, ElevenLabs, Groq API, Ollama, ffmpeg, FunASR.</p> |
| <p><b>Project Description:</b></p> <p><b>Domains:</b></p> <p><b>Involvement Duration:</b></p> <p><b>Project Role:</b></p> <p><b>Responsibilities:</b></p>  | <p><b>AI-powered sales intelligence platform for identifying and analyzing potential buying committee members</b></p> <p>Developed a comprehensive sales intelligence platform designed to help sales managers and specialists identify potential Buying Committee members within target companies. The system combines AI-powered content analysis, CRM integration, and external data enrichment to streamline the sales prospecting process. Core features include automated product description generation from various content sources, seamless CRM synchronization, intelligent contact analysis for buying committee potential assessment, and LinkedIn-based contact discovery through external APIs.</p> <p>Sales Intelligence   AI/ML   CRM Integration   Data Analytics</p> <p>1 year</p> <p>Back-End Developer</p> <ul style="list-style-type: none"> <li>▪ Architected and developed the complete backend infrastructure supporting multi-source data ingestion and AI-powered analysis workflows;</li> <li>▪ Implemented web scraping capabilities using Playwright to extract and process product information from various online sources;</li> </ul>  |

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| <p><b>Project Team Size:</b></p> <p><b>Tools &amp; Technologies:</b></p>   | <ul style="list-style-type: none"> <li>▪ Built PDF content extraction and processing pipeline using pypdf for automated product documentation analysis;</li> <li>▪ Designed and developed RESTful APIs with FastAPI to support frontend functionality and external integrations;</li> <li>▪ Integrated multiple CRM systems (Salesforce, HubSpot) using aiohttp for seamless data synchronization and import capabilities;</li> <li>▪ Implemented robust data processing pipelines using pandas for handling CSV/Excel files and contact data management;</li> <li>▪ Designed and maintained PostgreSQL database schema using SQLAlchemy ORM and Alembic for migrations;</li> <li>▪ Configured comprehensive monitoring and error tracking using Sentry for production system reliability;</li> <li>▪ Developed natural language processing features using NLTK for enhanced contact and company analysis;</li> <li>▪ Built email notification system with SMTP integration and dynamic template rendering using Jinja2;</li> <li>▪ Integrated external LinkedIn API services for automated contact discovery and enrichment.</li> </ul> <p>5-6 team members</p> <p>Python (FastAPI), Playwright, pypdf, aiohttp, SQLAlchemy, Alembic, PostgreSQL, pandas, Sentry, NLTK, SMTP, Jinja2.</p>  |
| <p><b>Project Description:</b></p> <p><b>Domains:</b></p> <p><b>Involvement Duration:</b></p> <p><b>Project Role:</b></p> <p><b>Responsibilities:</b></p> <p><b>Project Team Size:</b></p> <p><b>Tools &amp; Technologies:</b></p> | <p><b>European information page</b></p> <p>A large-scale information portal providing comprehensive profiles of European companies and their executives. The platform contains over 15 million dynamically generated pages with detailed business data, enabling users to easily access corporate information, management records, and key organizational insights.</p> <p>Web development</p> <p>2 years</p> <p>Back-End Developer</p> <ul style="list-style-type: none"> <li>▪ Designed and maintained scalable backend architecture for processing and serving 15M+ dynamic pages;</li> <li>▪ Implemented new business features, including advanced search and filtering over Elasticsearch;</li> <li>▪ Built and integrated REST APIs for internal and external data services;</li> <li>▪ Optimized PostgreSQL queries and indexing for large datasets;</li> <li>▪ Developed asynchronous data pipelines using Asyncio and Aiohttp;</li> <li>▪ Automated PDF generation with WeasyPrint for exporting company records;</li> <li>▪ Integrated 10 external APIs to fetch legal data from government registries;</li> <li>▪ Integrated payment with Stripe;</li> <li>▪ Created scheduled jobs with Celery.</li> </ul> <p>3-5 team members</p> <p>Python, FastAPI, Jinja2, Weasyprint, Asyncio, PostgreSQL, Aiohttp, Elasticsearch, Celery, Docker.</p> |

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| <p><b>Certificates</b></p> | <p><b>Python Object Oriented Programming (OOP)</b><br/>         Udemy </p> <hr/> <p><b>Master Git and GitHub</b><br/>         Udemy </p> |
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|                  | <b>The Ultimate Web Scraping With Python</b><br>Udemy   |  |
| <b>Education</b> | <b>Bachelor's degree</b><br>Odessa National Polytechnic University<br>Computer Software Engineering |   |
| <b>Languages</b> | <b>English:</b> Advanced<br><b>Ukrainian:</b> Native<br><b>Russian:</b> Native                      |   |