

Diyar Makhambetali

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EDUCATION

Nazarbayev University

Bachelor of Science in Computer Science

August 2024 - June 2028 (Expected)

Astana, Kazakhstan

TECHNICAL SKILLS

Languages & Frameworks: Python, Django, FastAPI, DRF, Celery, Pandas, TypeScript

Databases & DevOps: PostgreSQL, Redis, Docker, Nginx, AWS S3, CI/CD

AI/ML & Tools: LLM, vLLM, STT/TTS, RabbitMQ, Git, Postman

AWARDS

KazMunaiGaz: 2nd / 54 teams (2026)

Outpeer: 2nd / 80 teams (2025)

Decentrathon 4.0: Top 10/300 teams (2025)

EXPERIENCE

Institute of Smart Systems and Artificial Intelligence (ISSAI)

Backend Engineer

December 2025 – Present

Astana, Kazakhstan

- Replaced the **LLM** model on a production server using **Docker**, reducing **GPU VRAM** consumption by **68%** while maintaining stable backend performance.
- Integrated internal **microservices** (core products with payment service) using **API Key (x-api-key)** and **JWT (Bearer)** authentication.
- Diagnosed and resolved bottlenecks in the async **Django + RabbitMQ + Celery** architecture by implementing horizontal scaling of **Docker**-based consumers, reducing queue backlog and improving **LLM** streaming response latency.
- Built a **middleware** layer for logging and alerting using **Python Loguru**, with automatic delivery of critical errors to **Telegram** for faster incident response.
- Designed and implemented a **CI/CD pipeline** with automated **Pytest** test execution on a **self-hosted** infrastructure.
- Integrated **faster-whisper** into the **Speech-to-Text** service, reducing inference time by **3x** and enabling **streaming** response support.

Baiterek National Investment Holding

Intern Data Analyst

October 2025

Astana, Kazakhstan

- Collected and processed **KASE** market data using **Python**, **Playwright**, and **pandas**.
- Automated extraction of bonds, trades, and coupons into **CSV** via **n8n** workflows.
- Built a fully automated **data pipeline** with **async programming**, reducing scraping time from **1 hour to under 10 minutes**.
- Built **BI** dashboards in **Tableau** and **Metabase**, developing **ETL** pipelines with complex **raw SQL** queries for analytics and financial reporting.

Clario AI

Python Backend Developer

June 2025 – August 2025

Astana, Kazakhstan

- Integrated **STT** services (**ElevenLabs** and **AssemblyAI**) for automated processing of phone call recordings.
- Integrated **CRM** systems (**AmoCRM** and **Bitrix24**) via **webhooks** for real-time lead status tracking, saving an estimated **15+ hours** of manual work per week.
- Architected a **Gemini LLM**-based deal revival system that analyzed failed leads from **PostgreSQL**, resulting in re-engagement of **200+ leads** and a **15% increase** in conversions from that segment.
- Implemented **JWT** authentication for stateless session management and **OAuth 2.0** to secure API endpoints.

PROJECTS

dukenCRM — Django, DRF, TypeScript, PostgreSQL, Redis, Celery, AWS S3, CI/CD

- Built a **business management system** for SMBs using **Django**, **DRF**, and **PostgreSQL**, deployed with **Docker** and **Nginx**.
- Implemented **Redis** caching and **Celery** scheduled tasks to automate routine operations and reduce server response time.
- Integrated **AWS S3** for reliable file storage and seamless project scalability.
- Integrated **Gemini LLM** to provide AI-powered insights and automation within the management workflow.