

MUHAMMAD ABDULLAH AISH

BACKEND & DATA ENGINEER | PYTHON / FASTAPI | AI-ENABLED SYSTEMS

Pakistan | Open to international remote roles | Email: abdullaishaish7@gmail.com | LinkedIn: [linkedin.com/in/abdullaishaish](https://www.linkedin.com/in/abdullaishaish) |
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PROFESSIONAL PROFILE

Results-driven Software Engineer with 4+ years of professional experience designing, developing, and maintaining scalable backend systems, RESTful APIs, data pipelines, and cloud-native applications. Strong expertise in Python, FastAPI, Django, PostgreSQL, distributed systems, and cloud infrastructure, with hands-on experience in data engineering, AI/LLM integrations, and prompt engineering. Experienced in building production-grade SaaS platforms, integrating complex third-party systems, optimizing database performance, and implementing secure, reliable software architectures. Skilled in end-to-end product development, system design, automation, and CI/CD, with a strong focus on performance, scalability, and maintainability.

CORE TECHNICAL SKILLS

Backend & APIs: Python, FastAPI, Django, Django REST Framework, Flask, REST APIs, async programming, SQLAlchemy 2.0, Pydantic, API integrations, service architecture

Data Engineering & SQL: PostgreSQL, MySQL, SQL, ETL/ELT workflows, ingestion and transformation pipelines, data-source normalization, mappings, migration and reconciliation scripts, Snowflake, Databricks, Apache Spark, Airbyte

AI & Applied ML: LLM API integration, prompt engineering, AI-agent workflows, Azure AI Foundry, retrieval/AI integration concepts, AI-assisted development, data science and machine learning

Infrastructure & Cloud: AWS, Microsoft Azure, Docker, Kubernetes, GitHub Actions, Jenkins, GHCR, CI/CD, Linux, Traefik, environment configuration, observability and deployment troubleshooting

Security & Architecture: OAuth2, JWT, JWKS, Keycloak, AWS Cognito, argon2id, MFA/TOTP, RBAC, PostgreSQL row-level security, Redis, multitenancy, microservices

Frontend & Product: TypeScript, React, Next.js, TanStack Query, full-stack collaboration, technical design, test automation, code reviews, Git/GitHub

PROFESSIONAL EXPERIENCE

RedMath | System Analyst / Backend & Data Engineering | Jan 2023 – Present | Pakistan | Client engagement: Valutico

- Develop and maintain Python/FastAPI microservices powering Valutico valuation workflows, including equity allocation, transactions, company and market data, and financial-data APIs.
- Develop backend equity-allocation calculations and reporting datasets, validated Excel import/export templates, spreadsheet parsers, and API contracts; support migration of calculation logic from frontend to backend.
- Build and maintain integrations with S&P Capital IQ (CIQ), EMIS, and Beauhurst datasets; normalize external company and transaction data, map fields, investigate search results, and validate downstream data consistency.
- Work on transaction discovery/search APIs using FastAPI, Pydantic and asynchronous SQLAlchemy, including multi-source filtering, role-based data-source access, system/user transaction queries, and REST service migration.
- Write and validate PostgreSQL SQL scripts for NAICS, GICS, NACE and SIC industry taxonomy migrations, parent-child mapping, multilingual industry names, reference-data reconciliation, and staging/production comparisons.
- Extend financial valuation and DLOM functionality with Ghaidarov method support, configurable calculation weights, report datasets, Excel/PDF output, and automated regression testing.
- Work with Azure AI Foundry, prompt engineering and LLM-enabled product features; evaluate prompts, support AI-service integrations and improve data-driven workflows.
- Coordinate across backend, frontend and QA teams on API changes, regression testing, defect investigation, compatibility, release readiness and structured pull requests.
- Investigate Redis/application caching and service-migration behavior, API correctness, backend test failures and cross-environment data issues in production-oriented systems.

RedMath | Software Engineer | Earlier tenure within Jan 2023 – Present

- Worked across application engineering and data-oriented tasks before moving into the System Analyst role, combining Python development, databases, backend integration and analytical problem-solving.

Rapid Plus Solutions | Software Engineer | Jun 2021 – Dec 2022 | Remote

- Developed Python-based software and data solutions in a remote engineering environment, working across backend functionality, database integration and analytical requirements.

- Supported data preparation, SQL/query work, application troubleshooting and delivery of business-driven features in collaboration with distributed stakeholders.
- Translated business requirements into maintainable backend implementations, database queries, and tested application changes.

SELECTED ENGINEERING PROJECTS

Valutico | Financial Valuation & Deal Intelligence Platform | Client project (RedMath)

- Contribute to Valutico, an international financial technology platform for business valuation, company/peer analysis, transaction comparables, deal intelligence, and AI-assisted finance workflows.
- Engineer Python/FastAPI services for financial workflows, including equity allocation calculations, transaction search/filter APIs, and financial-data integrations across service boundaries.
- Integrate CIQ (S&P Capital IQ), EMIS and Beauhurst market datasets; implement data normalization, source-aware API behavior and access controls, and troubleshoot transaction/company search consistency.
- Develop SQL migration, reconciliation and verification scripts for NAICS, GICS, NACE and SIC taxonomies, hierarchical mappings and multilingual reference data.
- Build import/export and report-generation workflows for equity allocation, DLOM/Ghaidarov valuation-method enhancements, configurable weighting, and Excel/PDF financial reports.
- Support AI-powered finance features using Azure AI Foundry and prompt engineering; contribute to caching analysis, backend testing, and coordinated release delivery.

Humzio | Founder & Lead Engineer | *Multi-tenant HR SaaS | Independent product*

- Architected and built a multi-tenant HR SaaS platform using FastAPI, Python 3.12, asynchronous SQLAlchemy 2.0, PostgreSQL 16, Redis and Next.js 15, covering backend architecture through cloud deployment.
- Designed PostgreSQL row-level security and tenant-aware authorization, organization/user roles, last-admin protection, JWT authentication, refresh-token rotation, optional and enforced MFA workflows, recovery codes and recovery phrases.
- Built operational features including leave management and notifications, administrative onboarding/activation, bulk imports, per-organization SMTP, subscription requests, billing modules and localized product interfaces.
- Established environment-separated development, staging, demo and production deployment workflows on Linux VPS infrastructure using Docker, Traefik, GitHub Actions, GHCR and secrets management.
- Developed background worker and scheduler processes using Redis Streams and scheduled tasks; worked on reliability, database migrations, release workflows and test-driven improvements.
- Built both technical platform and product-facing components, providing hands-on experience with early-stage startup tradeoffs, feature prioritization, security hardening and release management.

EDUCATION

MS Data Science

BS Computer Science