Abdullah Mujahid

Senior Software Engineer

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SUMMARY

Software engineer with 8+ years of experience building web applications, mostly in Python/Django and React. I've worked across healthcare, fintech, and AI — shipping products, leading small teams, and getting into the weeds of system design when needed. Comfortable owning features end-to-end, from database schema to frontend polish. More recently, I've been deep in LLM integrations and data pipeline work.

TECHNICAL SKILLS

• Python • JavaScript • Django • React.js • Next.js • Agile • FAST API • PostgreSQL • MYSQL/MariaDB • Redis • MongoDB • Sentry • SonarQube • Design Patterns • TDD • Jira • Clickup • Github • Docker • Micro Frontend • Backend for Frontend • Amazon SES • Celery • Amazon Bedrock • CI/CD • Nginx • Ether.js • Web3.py • Abstract Factory Pattern • Apache Kafka • Microservices • MageAI • DuckDB • Service Mesh • Event-Driven Architecture • ETL • Distributed Systems • Apache Nifi • Azure • AWS• Wagmi • MCP • Elasticsearch

SOFT SKILLS

• Project Management • Team Leadership • Narrative Collaboration • Problem Solving • Time Management • Agile • Client Communication • Conflict Resolution • Resource Planning • Mentorship & Coaching • Technical Writing • Cross-functional Collaboration

EXPERIENCE

Astel Ventures, United Arab Emirates — *Senior Software Engineer*

May 2025 - PRESENT

- Developing and architecting core platform features for an early-stage investment platform from the ground up.
- Implemented multi-LLM architecture for deal analysis, pitch deck extraction, and automated investor outreach (the main differentiator of the product).
- Integrated Elasticsearch for investor search with filtering by criteria like ticket size, geography, and industry.
- Set up the full infrastructure on DigitalOcean, managed with Docker and RabbitMQ for async processing.
- Implemented automated data collection and processing pipelines using BrightData and EmailEngine, enabling real-time investment insights and user notifications.
- Involved in UX audits and business planning alongside the founding team
- Configured monitoring and communication systems with Slack integration, ensuring rapid incident response and seamless team collaboration
- Integrated third-party services including ReplyIO for campaign management, RapidAPI and ScraperAPI for data aggregation

Skills: Team Leadership, Project Management, Code Review, Django, Vue.js, AWS, Digital Ocean, CloudFront, Elasticsearch, RapidAPI, ScraperAPI, BrightData, EmailEngine, Slack Integration, Stripe, DevOps, Investment Platform Development, API Architecture, Performance Optimisation..

Sparignite, Belgium — *Technical Lead & Engineering Manager*

September 2024 - December 2025

- Led a team of 6 engineers building a regulatory reporting platform for financial institutions owned sprint planning, architecture decisions, and delivery.
- Designed data management systems with version control that held up through financial regulatory audits
- Built ETL pipelines to process large regulatory datasets
- Created Excel integration features that eliminated most of the manual data entry our clients were dealing with
- Drove a codebase refactoring initiative that brought down bug rates and sped up feature delivery
- Architected and implemented cloud infrastructure using Docker and Kubernetes to support highly scalable deployment architecture
- Ran code reviews, mentored devs, & put together onboarding processes that got new hires up to speed faster.

Skills: Team Leadership, Project Management, Technical Mentoring, Strategic Planning, Capacity Planning, Process Optimization, Technical Architecture, Docker, Kubernetes, Redis, Python.

Vada Innovation, UK — Technical Lead

October 2024 - May 2025

- Architected and optimised data pipelines that reduced ETL processing time by 30% and enhanced data accuracy by 20%
- Designed a scalable analytics system processing 200K daily events with consistent response times, enabling new features that improved user engagement metrics by 15%
- Implemented Redis caching solutions that improved application response times by 40% and reduced database load during peak traffic by 25%
- Established coding standards, design patterns, and review processes that decreased critical bugs by 35% and improved maintainability across the codebase
- Architected and implemented cloud infrastructure using Docker and Kubernetes to support highly scalable deployment architecture
- Mentored junior developers through code reviews and architectural guidance, improving overall team code quality and technical capabilities.

Skills: Team Leadership, Resource Planning, Performance Management, Technical Mentoring, Strategic Planning, Capacity Planning, Process Optimization, Cross-functional Communication, Technical Architecture, Data Engineering, Docker, Kubernetes, Redis, Python, ETL pipelines, CI/CD, Cloud Architecture, PostgreSQL.

Crocus Zone, USA — *Senior Software Engineer*

Feb 2023 - October 2024

- Designed and implemented the transition to a microservices architecture using Django and FastAPI that improved deployment flexibility by 30% and reduced system dependencies
- Architected data processing pipelines with Apache Kafka that handled 2x traffic growth while maintaining consistent performance under load
- Implemented monitoring and observability solutions that improved incident detection, reducing average response time from 40 to 15 minutes
- Designed and implemented caching and load-balancing strategies that reduced database load by 50% during peak usage periods
- Established CI/CD pipelines that shortened deployment cycles from weekly to twice-weekly releases while maintaining service reliability
- Led technical discussions and architectural design reviews to ensure alignment with business requirements and technical standards.

Skills: Django, FastAPI, Apache Kafka, Microservices, Service Mesh, Redis, Load Balancing, CI/CD, Team Building, Process Optimization, Technical Mentorship

Carte Blanche, USA — *Senior Software Engineer*

July 2021 - Jan 2023

- Architected microservices using Django/FastAPI that improved system reliability by 45% and supported 100K+ daily active users across multiple products.
- Pioneered the company's first AI initiatives, implementing solutions using LangGraph and AWS Bedrock that transformed workflows for medical and educational clients.
- Led a team of 5 developers in building AI-powered features that reduced manual work by 33% and improved data processing accuracy by 25%.
- Implemented RabbitMQ for asynchronous processing, improving throughput & better handling traffic spikes.
- Refactored frontend that cut load times by 40% and helped increase conversion rates by 12%.
- Enhanced payment processing with Stripe, implementing validation routines that reduced fraudulent transactions.
- Trained engineering teams on AI technologies and successfully delivered projects using LangGraph, CrewAI, and AWS Bedrock for medical and educational niches.

Skills: Django, FastAPI, React, RabbitMQ, AWS Bedrock, LangGraph, CrewAI, Stripe API, Technical Project Leadership, Team Mentoring, AI Implementation

Global Group One, New York, USA — Software Engineer

July 2019 - June 2021

- Engineered a Django-based backend infrastructure that scaled to support 50K+ daily active users, resulting in 95% uptime during company growth.
- Implemented database and query optimizations that improved page load times and API response times.
- Implemented React.js frontend optimizations that reduced bundle size by 65% and decreased initial load time by 3.2 seconds, directly contributing to an improvement in the conversion rate.
- Helped configure AWS infrastructure with auto-scaling capabilities that better managed traffic fluctuations while controlling costs.
- Contributed to improving agile practices, helping increase on-time feature delivery from 65% to 85%.
- Created technical documentation that reduced onboarding time for new developers and provided clearer system architecture references.

Skills: Django, React.js, AWS, PostgreSQL, RESTful APIs, Git, Agile Development, System Architecture, Technical Documentation

deSwot, Beirut, Lebanon — *Full Stack Software Engineer*

September 2017 - June 2019

- Developed and deployed a Node.js/Express.js backend that reduced API response times by 40%, resulting in improved user engagement metrics and 25% higher retention rates.
- Engineered responsive React.js interfaces from Figma designs that decreased bounce rates by 30% and increased mobile user conversion by 22% across all target demographics.
- Optimized MongoDB schemas and implemented advanced query patterns that reduced database load by 45% and cut cloud infrastructure costs by $2,000 monthly.
- Built and integrated Redux state management solution that eliminated 90% of UI-related bugs and accelerated feature development time by 35%, allowing the team to deliver product updates ahead of schedule.

Skills: Node.js, Express.js, React.js, Redux, MongoDB, RESTful APIs.

BMJ Consultant, Ireland — Associate Software Engineer

July 2016 - August 2017

- Contributed to the development of a farm management system using Node.js, Express, and MongoDB that helped streamline operations for 600+ agricultural businesses.

- Assisted in implementing API endpoints that connected various system components, improving data flow and user experience for farmers.
- Collaborated with senior developers to optimise database queries, helping decrease page load times by 35% for frequently accessed features.
- Participated in client requirements gathering sessions, documenting key user stories that guided feature implementation and prioritisation.

Skills: Node.js, Express, MongoDB, RESTful APIs, Git

EDUCATION

University of Management & Technology — *Bachelor of Computer Science*

- CGPA: 3.57/4.0 | Rector's Award for a perfect GPA of 4.0 in a semester.

PROJECTS

AIRA (Investor Startup Intelligence Platform) | Senior Engineer & Technical Architect:

- Architected an AI-powered investor intelligence platform from MVP to production, enabling startups to discover and connect with relevant investors at scale.
- Designed and implemented a multi-LLM architecture with per-tenant configuration, enabling intelligent deal analysis, pitch deck extraction, and personalized outreach content generation.
- Built advanced investor search system using Elasticsearch with complex filtering by investment criteria, ticket size, geography, and industry, reducing investor discovery time by 60%.
- Engineered automated deal analysis pipeline that processes pitch decks through multi-stage LLM evaluation, scoring Market Need, Innovation, Defensibility, Scalability, Traction, and Team with comprehensive reporting.
- Developed AI-powered contact personalization system generating career-based, manager-based, and regional insights for email outreach, improving response rates.

- Implemented multi-tenant architecture with whitelabel support, allowing per-customer LLM vendor configuration and domain customisation

Tech Used: Django, Vue.js, PostgreSQL, Elasticsearch, Redis, Celery, Docker, Claude, OpenAI, Gemini, Perplexity AI, ReplyIO API, Tailwind CSS, Pinia, shadcn-vue, PostGIS, Django REST Framework

Mitra AI | Lead Engineer & Technical Architect:

- Architected and developed an AI-powered relationship mentoring platform.
- Designed and implemented real-time voice AI agents using Python and LiveKit Agents Framework, integrating OpenAI GPT-4 Speechmatics/Deepgram STT, and ElevenLabs TTS for natural conversational experiences.
- Built a speaker diarization system that accurately identifies multiple participants in couples sessions, enabling balanced AI feedback to both partners with 92%+ speaker identification accuracy.
- Implemented encryption for all conversation transcripts, ensuring HIPAA-compliant privacy standards and zero human access to sensitive data.
- Developed a comprehensive session management system with AI-generated summaries, encrypted transcript storage, and progress tracking across multiple mentoring sessions.

Tech Used: TypeScript, React, Node.js, FastAPI, LiveKit, OpenAI, PostgreSQL, Redis, Docker, AES-256-GCM Encryption, Speechmatics, ElevenLabs, Google Cloud Run, WebRTC, React Native

RegNxt | Technical Lead & Engineering Manager:

- Led a team of 6 engineers to build a regulatory reporting platform that reduced compliance reporting time by 40% for financial institutions.
- Architected scalable data management systems with version control that passed all financial regulatory audits.
- Implemented Excel integration features that eliminated 70% of manual data entry for client teams.
- Directed the refactoring initiative that reduced bug rates by 35% and accelerated feature delivery.
- Established a technical mentoring program that improved code quality and reduced onboarding time by 60%.
- Mentored team members through code reviews and architectural guidance.

Tech Used: Django, React, TypeScript, Azure Cloud, Azure API Gateway, PostgreSQL, MageAI, Firebase, Tailwind CSS, and Docker

Veterinary AI | Lead Engineer:

- Led the technical vision and development of an innovative veterinary SaaS platform that reduced diagnostic time by 40% for over 50 veterinary practices.
- Architected a SaaS platform for veterinary practices using microservices architecture
- Developed custom LLM solutions that accurately analyzed 10,000+ medical records per day, identifying potential health issues with 87% accuracy.
- Engineered sophisticated AI workflows using LangGraph that automated routine diagnoses, allowing veterinarians to focus on complex cases.
- Integrated LangGraph for AI workflows and Pinecone for vector database storage.
- Established DevOps practices and CI/CD pipelines that reduced deployment time from days to hours while maintaining system reliability.

Tech Used: Django, React.js, FastAPI, LangGraph, Pinecone, Stripe, AWS, PostgreSQL, Redis, Docker, OpenAI API, Custom LLMs.

SI Paradigm | Technical Lead & Engineering Manager:

- Led a team of 7 developers to deliver a HIPAA-compliant medical laboratory management platform that reduced lab processing time by 30%
- Established development roadmap and architecture decisions that enabled successful integration with 5 third-party laboratory systems
- Implemented team performance metrics and code review processes that decreased critical bugs by 45% and improved release predictability
- Directed the implementation of Redis caching strategy that improved system response times by 45% during peak laboratory hours
- Managed client relationships and technical requirements gathering, resulting in 100% client retention and 3 referral clients
- Oversaw cross-platform mobile development, ensuring consistent performance across iOS and Android devices

Tech Used: Django, Django REST Framework, PostgreSQL, Redis, Docker, Ionic React.js, TypeScript, AWS, Team Leadership, Technical Planning, Cross-functional Collaboration, Performance Optimization, Client Relationship Management, Technical Architecture, Mobile Development Strategy, Resource Allocation

Hirecinch | Senior Engineer & Product Manager:

- Led product strategy for an applicant tracking system while managing a team of 4 developers through a major platform refactoring initiative
- Designed and implemented the product roadmap based on user research that increased client adoption by

35% within six months

- Prioritised feature development using data-driven metrics, reducing development cycles by 40% while increasing user satisfaction scores
- Engineered a Resume Parser microservice that automated candidate data extraction with 85% accuracy, saving recruiters 20+ hours weekly
- Built custom organizational career pages that improved application completion rates by 45% across client companies
- Implemented an integrated billing system with Stripe API that increased revenue collection efficiency by 30% and reduced payment failures

Tech Used: Django, React.js, Next.js, Node.js, AWS, PostgreSQL, MUI, Tailwind, Redis, Product Strategy, User Research, Feature Prioritization, Technical Leadership, Microservice Architecture, Team Management, Sprint Planning, Stakeholder Communication

Deals 4 Autos – Car BDC Service | Lead Developer & Product Manager:

- Led the successful transformation of a legacy car dealership platform from PHP to a modern React/Django architecture that increased dealership efficiency by 35%
- Managed a team of 5 developers through comprehensive platform redesign while maintaining continuous service for 40+ active dealerships
- Designed and implemented an integrated payment system with Wells Fargo, Stripe and PayPal that processed over $2M in monthly transactions with 99.8% reliability
- Created customizable analytics dashboards that provided dealerships with critical insights, increasing average inventory turnover by 22%
- Orchestrated infrastructure migration to AWS that improved system reliability from 94% to 99.5% uptime while reducing hosting costs by 30%

Tech Used: Django, React.js, WordPress, CPanel, PostgreSQL, AWS, Technical Leadership, Product Strategy, Payment Systems Integration, Legacy System Modernization, Cloud Migration, Team Management

Public Editor | Backend & AI Engineer:

- Architected a secure authentication system with multi-factor authentication that improved account security by 65% while maintaining seamless user experience
- Implemented a comprehensive email communication system using Amazon SES that delivered 99.8% of transactional emails with robust tracking and analytics
- Designed and deployed a Stripe subscription management system that increased payment success rates by 28% and reduced billing support tickets by 40%
- Integrated Anthropic Claude 3.5 to power automated content analysis, reducing manual content review time by 75% while maintaining quality standards
- Developed sophisticated NLP solutions for article scraping and semantic analysis that processed 10,000+ news articles daily with 92% accuracy.

Tech Used: Django, Stripe, Amazon SES, PostgreSQL, Redis, Anthropic Claude 3.5, Python (NLP libraries).

LKSY | Full Stack Developer:

- Developed an interactive learning platform that enabled 1,500+ students to complete coding exercises using Scratch, increasing average lesson completion rates by 45%.
- Engineered a robust submission system using AWS S3 that securely handled 20,000+ monthly task submissions while maintaining 99.9% availability.
- Implemented automated testing with Whisker framework on AWS Lambda that provided immediate feedback to students, improving learning outcomes by 30%.

- Created a scalable background processing system with Redis and Celery that managed assignment grading and progress tracking with minimal latency.
- Integrated analytics capabilities that provided educators with detailed student performance metrics, helping identify struggling students 40% faster.

Tech Used: Django, Heroku, AWS, Celery, Redis, Serverless Architecture, Asynchronous Processing