


Mubashar Khokhar

Python Backend Engineer, AI/ML Specialist

 m.khokhar@social-gizmo.com

 +491629613981

 Berlin, Germany

 <https://www.linkedin.com/in/mubasharkk>

 <https://github.com/mubasharkk>



Skills

- PHP7/8 (Laravel, Symfony, Yii2) -• Python 3.x (FastAPI, Django, Flask) Web Apps
- RESTful API Development
- Frontend Development (ReactJS, VueJS, NuxtJS)
- LLM Training & Fine-tuning
- PostgreSQL, Redis, MongoDB
- Microservices Architecture
- Cloud Infrastructure (AWS)
- Docker & Containerization
- Technical writing, documentation, requirement gathering
- Test automation using Selenium and Cucumber
- Backend Systems & Scalable Architecture
- Generative AI Integration & Agent Development
- AI Agent Development & Workflow Automation
- LLM Training & Fine-tuning, AI Model Integration
- Shell scripting, Linux Server Administration & Git
- AWS (EC2, Lambda, S3, VPC, RDS), Docker, Terraform
- Experience in team management, code reviewing and mentoring
- Scrum, Agile Software Development Processes
- Ollama3, API Integration & LLM Fine-tuning, Prompt Engineering

Languages

English (Fluent / Professional) Deutsch (B2 / Verhandlungssicher)

Python & AI Expertise

- **Python Backend Development:** 3+ years experience with FastAPI, Django, Flask for building scalable RESTful APIs
- **Generative AI Integration:** Experience with ChatGPT, DeepSeek, Ollama3 for building AI agents and automated workflows
- **AI Agent Development:** Designed and implemented intelligent agents for document processing, categorization, and user assignment automation
- **Agentic APIs:** Experience in writing and implementing agentic APIs that enable autonomous AI agents to perform complex tasks, make decisions, and interact with multiple systems through intelligent API orchestration
- **LLM Training & Fine-tuning:** Experience with Ollama3, model training, fine-tuning, and AI-driven document processing systems
- **Database & Caching:** PostgreSQL, Redis, MongoDB with optimization for AI workloads
- **Cloud Infrastructure:** AWS (EC2, Lambda, S3, RDS) deployment for AI applications
- **Microservices:** Containerized Python services with Docker and monitoring for production AI systems

Experience

Senior Software Entwickler
Berlin
Linux Solutions GmbH

Jul 2024 - Present

- Developing and managing Deutsche Bahn-collaborated projects using PHP, Joomla, AWS, Docker, MongoDB and shell scripting for robust infrastructure and application solutions.
- Driving CI/CD implementation for existing projects in GitLab and optimizing workflows with Docker-based solutions.
- **Tech stack:** PHP/Joomla, MariaDB, AWS, Dockers, Shell, MongoDB.

External Consultant & Developer
Docunout GmbH & Belegebox (Part-Time/Remote)

May 2024 - Present

- **Generative AI Integration & Agent Development:** Built a Laravel-based document processing platform integrating multiple AI models (ChatGPT, DeepSeek, Ollama) for automated document analysis and categorization. Developed intelligent AI agents that autonomously process documents, categorize content, and assign tasks to relevant users. Implemented dynamic prompt engineering with custom AI prompt configuration, RESTful APIs for document upload/OCR processing, and comprehensive user management with external service integration. Created automated workflows where AI agents handle end-to-end document processing with minimal human intervention.
- **RESTful API Development:** Built high-performance OCR API using Python FastAPI with PostgreSQL, implementing JWT authentication, batch processing with queuing systems, and webhook integrations for real-time updates.
- **Cloud Infrastructure:** Deployed and managed cloud-based file storage solutions using AWS S3 and MinIO, ensuring scalable and reliable data storage for AI processing pipelines.
- **AI Agent Architecture:** Designed microservices architecture for PDF optimization and image processing, implementing security best practices and monitoring for production AI workloads. Developed intelligent agent orchestration system that coordinates multiple AI models for complex document processing workflows, ensuring high availability and fault tolerance for AI-driven automation.
- **Tech stack:** Python3/FastAPI, PostgreSQL, Redis, Ollama3, Open WebUI, Linux/Docker, AWS S3/MinIO, PHP/Laravel, ChatGPT API, DeepSeek API

PHP Backend Developer
AlsterSpree Verlag GmbH, Berlin - Germany

Oct 2022 - Jan 2024

- **Backend System Development:** Crafted a robust multisite CMS platform tailored for companies within the insurance industry, implementing scalable backend services with proper API design and database optimization.
- **Performance Optimization:** Implemented backend optimization techniques, improving website speed by 40% and reducing bounce rate by 25%, resulting in a 15% increase in online sales revenue through efficient database queries and caching strategies.
- **Tech stack:** PHP/Laravel, MySQL, VueJS/NuxtJS, Linux/Docker, AWS S3.

Senior Software Engineer
Gastfreund GmbH, Berlin - Germany

Apr 2018 - Sep 2022

- **Microservices Architecture:** Successfully decoupled a large monolithic application into smaller independent microservices, leveraging expertise in backend development to build robust APIs using Yii2 and Laravel frameworks.
 - **Backend System Design:** Designed and implemented scalable backend services with proper API documentation, database optimization, and caching strategies for high-traffic applications. Integrated AI-powered automation for user workflows and content management.
 - **Team Leadership:** Mentored 2-3 junior developers and shared expertise in coding best practices, code reviews, and engineering standards to help them grow their skills.
 - **Tech stack:** PHP/Laravel/Symfony/Yii2, MySQL, NodeJs/MongoDB, Linux/Docker, AWS S3.
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Software Engineer

Nov 2016 - Mar 2018

Move24 Group GmbH, Berlin - Germany

- **Platform Development:** Led the development of a user-friendly platform enabling B2C customers to access affordable moving services across multiple European countries, resulting in a successful launch that streamlined the moving process and provided customers with reliable and cost effective services.
- **RESTful API Development:** Designed and built 2 production-ready APIs for PDF report generation and invoicing, implementing SSO features for user authorization and authentication, and developing a comprehensive order management admin portal with proper API documentation. Integrated AI-powered automation for report generation and customer service workflows.
- **Tech stack:** PHP/Laravel/Symfony, MySQL, Linux/Vagrant, Selenium + Cucumber.

Master Thesis Student (Technical Lead)r

Feb 2015 - Oct 2016

NETVAI UG, Kiel Germany

- Conceptualized and engineered the comprehensive system architecture using Drupal7 framework and JQuery.
- Strategize a business model and wrote a business plan leveraging the robust Business Model Canvas framework as the cornerstone for my thesis and master project.
- Demonstrated advanced proficiency in strategic planning, meticulously documenting intricate technical details, and orchestrating cohesive system designs, reflecting a mastery of both theoretical and practical aspects of software engineering and strategic planning.
- **Tech stack:** PHP/Drupal7/Laravel, MySQL, Linux/Vagrant/Shell, Selenium/Cucumber

Key Achievement:

- Won the German Association of Movers and Logistics (AMO) e.V., MoLo award for "*Product Innovations for the Industry*", which was a great achievement for the company. (<https://moelo.de/en/#program>)

PHP Developer

Mar 2014 - Jul 2014

naymspace software GmbH, Kiel - Germany

- Crafted WordPress plugins adhering to XLIFF standards, ensuring seamless integration and internationalization capabilities.
- Orchestrated PHP and Symfony framework integration with Node.js to develop a robust e-commerce platform; optimized backend processes, resulting in a 40% increase in site speed and a 25% reduction in bounce rate.

Senior Software Engineer

May 2012 - Sept 2013

Folio3 Pvt. Ltd, Karachi - Pakistan

- Designed and developed a social networking platform for executives and CEOs, combining the functionality of Facebook and LinkedIn.
 - Implemented features such as social login, user profiles, newsfeed, messaging, groups, and events.
 - **Tech stack:** PHP/Drupal7, MySQL, Linux/Shell.
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Web Developer Oct 2010 - Mar 2012
Game Ventures Pvt. Ltd., Karachi - Pakistan

- Designed and developed an analytics tool using PHP and MongoDB for a high volume game & integrated social platform components. Integrated the analytics tool with the game server for real-time data collection and analysis.
- Engineered a system to monitor application performance and alert stakeholders of any potential issues.
- **Tech stack:** PHP/CodeIgnitor, MySQL/MongoDB, Linux/Shell

Web Developer Mar 2009 - Oct 2010
Parse Ten Inc., Karachi - Pakistan

- Refactored legacy code to improve reliability, scalability and maintainability. Developed a content management system for a media company that reduced maintenance costs by 35%.
- **Tech stack:** PHP, MySQL, Facebook API, Google APIs.

Projects

- <https://belegebox.de/>
- <https://gastfreund.net>
- <https://vislog.net>

Certifications

- AWS Certified Solutions Architect - Associate

Education

Masters Information Technology Oct 2013 - Feb 2017
Fachhochschule Kiel, Kiel Germany

- **Master Thesis Topic:** VisLog | Providing a platform for umbrella organisations for moving companies and developing a long-term business strategy for the portal.
- **CGPA:** 1.7

BS Computer Science Jan 2006 - Dec 2010
University of Karachi, Karachi - Pakistan

- **CGPA:** 2.55