| Babak  zarrinbal | **Hands-on Fullstack Developer/ Dev-ops / Solution Architect**  **10+ years experienced.**  [Germany, Düsseldorf 40217](https://goo.gl/maps/NDecVXduiwrVtFuBA)  [Babak.zarrinbal@gmail.com](mailto:Babak.zarrinbal@gmail.com)  +49 157 3489 7539 | |
| --- | --- | --- |
|  | | |
| About me **[LinkedIn](https://linkedin.com/in/babak-zarrinbal/)**[: https://linkedin.com/in/babak-zarrinbal/](https://linkedin.com/in/babak-zarrinbal/)  **[NPM](https://npmjs.com/~babak.zarrinbal)**[: https://npmjs.com/~babak.zarrinbal](https://npmjs.com/~babak.zarrinbal)  **[GitHub](https://github.com/babakzarrinbal)**[: https://github.com/babakzarrinbal](https://github.com/babakzarrinbal)  [**GitLab:  https://gitlab.com/bzarrinbal**](GitLab:%20https://gitlab.com/bzarrinbal) | Hands on Devops 6 years, Development 10+ years  Titles: Teamlead / Lead developer / dev-ops Lead / Solution Architect / Technical Mng  Responsibilities: Design / Implementations / Team building / Mentoring  Domains: Telecom / Fintech / Commercials / Startups / Insurance / security  Personality: self-Growing / Team Worker / Energetic / efficient / on point  Quotes: Truth is Knowledge, Work is life, Growth comes from within self,  Team sent man to moon |

# Technologies

#### **AI SERVICES**

* **LLMs: LLaMA, LLaVA (text + vision), Mistral 7B, OpenAI GPT APIs, Google Gemini**
* **RAG & Vector Search: FAISS, Milvus, Weaviate, Pinecone; Recursive reasoning / agentic workflows**
* **Fine-tuning & Custom Training: PEFT/LoRA, HuggingFace Transformers, custom embeddings, domain-specific adaptation**
* **Speech & Audio: TTS & STT (Whisper, Coqui, NVIDIA NeMo, Vosk, Silero, ElevenLabs API)**
* **Vision / Simulation: NVIDIA Isaac Sim / Omniverse, NVIDIA James (visual simulations), YOLOv8/Detectron2 for CV tasks**
* **Custom AI Models: Identity & location matching, vector similarity, recommender systems**
* **AI Orchestration: LangChain, LlamaIndex, Haystack, Semantic Kernel**
* **AI Deployment: FastAPI, Flask, Triton Inference Server, TensorRT, ONNX Runtime, TorchServe**

#### **Infrastructure**

* **CI/CD: Jenkins, GitHub Actions, GitLab CI, CircleCI, Azure DevOps Pipelines**
* **Infrastructure as Code (IaC): Terraform (+4y), Ansible (+2y), Packer (+2y), RancherOS (+3y), Crossplane, Pulumi (basic)**
* **Kubernetes (+5y): Helm, HPA, KEDA, Karpenter, ArgoCD, External Secrets Operator (ESO), Velero, Kyverno, Service Mesh (Istio/Linkerd)**
* **Containers: Docker (+7y) – Multi-stage builds, Buildx, caching optimizations, OCI standards, containerd**
* **Monitoring & Observability: Prometheus, Grafana, Loki, Tempo, Datadog, ELK/EFK, OpenTelemetry, Metric exporters**
* **GitOps: ArgoCD, FluxCD**

#### **Cloud Platforms**

* AWS (+6y): EKS, ECR, EC2, IAM, Lambda, Fargate, VPC, API Gateway, CloudFront, S3, DynamoDB, CloudWatch, Step Functions, SAM, CDK
* Google Cloud (+3y): GKE, GAR, GCR, IAM, Secrets Manager, Service Accounts, Cloud Functions, Cloud Run, Pub/Sub, BigQuery
* Azure (+3y): Azure DevOps, AKS, ACR, Vault, VMs, Functions, App Service, Managed Identities, Service Bus, Event Grid
* Oracle Cloud (+2y): OCI (Compute, Networking, IAM), Oracle DB
* Other Cloud/Infra: DigitalOcean, Linode, Hetzner, Vercel, Netlify, Cloudflare Workers / KV / D1

#### **Platforms**

* **Applications**: Cloud services, Linux containerized apps, Web Apps, Electron, React Native, Mobile apps (Android/iOS basics)
* **Extensions**: Chrome Extensions, VS Code Extensions, Browser DevTools
* **Dev Tooling**: Makefiles, Shell scripting, Automation pipelines

#### **Languages**

* JavaScript (12y) & TypeScript (4y)
  + Frameworks: Node.js, NestJS, Express.js, Fastify, Next.js, React.js, Vue.js, Nuxt.js, Svelte, AngularJS, Angular 12+
  + Other: GraphQL, REST APIs, CLI tools, WebSockets (Socket.IO)
* Python (4y): Django, Flask, FastAPI, ML frameworks (PyTorch, TensorFlow, HuggingFace, LangChain)
* Bash (5y): Advanced automation, CI/CD scripting
* Java (2y): Spring Boot, Hibernate, Maven, JUnit
* Golang (1y): Gin, concurrency patterns, microservices
* PHP (4y): Laravel, Drupal, WordPress, Joomla
* Others (basic): C/C++, Rust (intro-level)

#### **Databases**

* SQL: PostgreSQL, MySQL, MariaDB, SQLite, SQL Server, Oracle DB
* NoSQL: MongoDB, Cassandra, DynamoDb
* Caches: Redis, Memcached
* Search: Elasticsearch, OpenSearch

#### **Message Brokers / Cache**

* RabbitMQ, Kafka, AWS SNS/SQS, Google Pub/Sub, Azure Service Bus/Event Grid, MQTT

**Speaking Languages**:

* English (Fluent) has been working with international teams since 2008.
* Persian (Native), my mother tongue
* German (A2), in process of learning

# Work History

**DOUGLAS INTERNATIONAL (March 2025 – Present)**

As a \*\*hands-on DevOps Engineer / Cloud Architect / Infrastructure Innovator\*\*, I fuel and scale the company’s infrastructure workloads across multi-cloud environments while pioneering \*\*AI-driven approaches\*\* to improve automation, resilience, and efficiency. I work closely with developers, DevOps engineers, and business stakeholders to design, deploy, and monitor enterprise-grade solutions.

* + *Key Achievements:*
    - *Designed and optimized \*\*pipeline orchestration\*\* that reduced VM pipeline usage costs by \*\*35%\*\* and improved overall build/deployment speed by \*\*40%\*\*.*
    - *Introduced \*\*AI-assisted monitoring and anomaly detection\*\*, reducing mean-time-to-resolution (MTTR) by \*\*30%\*\*.*
    - *Automated multi-cloud IAM and secret rotation workflows, improving compliance and cutting manual overhead by \*\*50%\*\*.*
  + *Technologies:*
    - *Kubernetes / Docker / Helm / Karpenter / KEDA / ArgoCD / ESO / Velero / Kyverno*
    - *CI/CD: Azure DevOps Pipelines, GitHub Actions, GitLab CI/CD, Jenkins (advanced YAML templating & automation scripting)*
    - *Cloud: Google Cloud (GKE, GAR, IAM, Secret Manager, Cloud Run, Pub/Sub), AWS (EKS, ECR, Lambda, S3, VPC, DynamoDB, CloudFront), Azure (AKS, ACR, Vault, VMs, Functions), Oracle OCI*
    - *Monitoring: Grafana, Prometheus, Loki, Tempo, Datadog, OpenTelemetry, custom exporters*
    - *AI Integration: RAG for operational knowledge, LLM-assisted automation, predictive scaling*
    - *Automation & Languages: Node.js, Python (FastAPI, Flask, ML integrations), Bash, Golang*
    - *Messaging & Data: Kafka, RabbitMQ, Redis, Memcached*
    - *Databases: PostgreSQL, MySQL, Cassandra, MongoDB, Oracle DB*
    - *Security & Governance: IAM, secret rotation, GitOps-based compliance, Kyverno policies*
    - *Other Tools: Terraform, Ansible, Packer, RancherOS, Crossplane, Cloudflare, Akamai*
* **MANAGBL.AI: (July 2024 – March 2025)**

As a hands-on T**eam lead/Devops/developer** I Mentor and lead and work together with my teammates to introduce features or improve existing ones on our AI agents

technologies included:

* + *Key Achievements:*
    - *Optimized infrastructure by leveraging \*\*AWS Spot Instances\*\*, cutting compute costs by \*\*45%\*\* while maintaining high availability.*
    - *Implemented advanced \*\*RAG-based AI agents\*\* with Whisper (STT) and Coqui (TTS), enabling faster iteration on client-facing features.*
    - *Enhanced system reliability and monitoring, reducing downtime incidents by \*\*30%\*\*.*
  + *Technologies:*
    - *Kubernetes / Docker / EKS*
    - *AI: LLM with RAG, STT with Whisper, TTS with Coqui TTS*
    - *Languages: Python, Bash, Node.js*
    - *Frontend: React.js*
    - *CI/CD: GitLab Workflow, GitHub Actions, Terraform, Bash automation*
    - *Monitoring: Grafana, Prometheus*
    - *Logging: Elasticsearch, Logstash, Kibana*
    - *Cloud: AWS (CLI, EKS, ECS, EC2, S3, Lambda, DynamoDB)*
    - *Databases: MongoDB, MySQL*
    - *Messaging & Caching: Redis, RabbitMQ*
* **Retraced: (Feb 2022- July 2024)**

As a hands-on **technical manager/team lead** I teach, guide, and work alongside my teammates to reach the goals of the platform which is vary.

technologies included:

* + *Key Achievements:*
    - *Improved deployment pipelines and infrastructure, reducing release times by \*\*30%\*\* and ensuring faster delivery to production.*
    - *Implemented advanced monitoring with DataDog, reducing production incident detection time by \*\*40%\*\* and downtime by \*\*25%\*\*.*
    - *Optimized cloud resource usage on AWS/OCI, achieving \*\*20% cost savings\*\* without impacting system reliability.*
  + *Technologies:*
    - *Node.js Microservices, React.js frontend*
    - *CI/CD: CircleCI, GitHub Actions, Terraform*
    - *Monitoring: DataDog*
    - *Cloud: AWS (ECS, EC2, S3, EKS), Oracle (OCI, ML, DB)*
    - *Messaging: RabbitMQ*
    - *Containers & Orchestration: Docker, Kubernetes, GitHub Actions*
* **Tecnotree: (Sep 2016-Feb 2022)**

As a **Technical Manager** I’ve managed 3 teams regarding development and maintenance of multiple (more then 70) services to ensure delivery of 3 main telecommunication projects  
in here I’ve managed, created, educated and guided new teams, and implemented the one man do it all approach on all the scenarios and proud to say I have guided almost 10+ people from junior seniority skills Technologies included:

* + *Key Achievements:*
    - *Reduced project delivery timelines by \*\*25%\*\* through streamlined CI/CD pipelines and agile team coordination.*
    - *Optimized service architectures, reducing infrastructure costs by \*\*20%\*\* across Kubernetes/Rancher deployments.*
    - *Increased system uptime and stability, cutting customer-reported issues by \*\*35%\*\* through improved observability and proactive monitoring.*

*Technologies:*

* + - *Docker, Kubernetes, Rancher*
    - *Node.js, Python, Bash, Golang (Gin), Spring Boot, Hadoop*
    - *Databases: Cassandra, MongoDB, MySQL*
    - *Messaging: Kafka, RabbitMQ*
    - *Frontend: React, Vue, AngularJS*
    - *CI/CD: Jenkins*
    - *Cloud: AWS, Google Cloud Services*
* **Diliviri/Eposense: (Sep 2015-Sep 2016)**

As **Team Lead and senior full stack** developer I developed and improved existing parts of the whole ecosystem of the Diliviri (app for deliver goods with hired/outsourced driver and vehicles). I added multiple apps as well as improvement in followings …

* + - *Changed monolithic Admin app to microservice architect (Efficiency +400%)*
    - *Converted Driver & Supervisor Native apps for IOS, Android to PWA apps (Development costs -60%)*
    - *Created complex Multi routing algorithms for concurrent deliveries with one driver (profit avg +50%)*
    - *Kick started standalone routing (in map) and tile Api server for completely free of charge map view and routing (map costs -100%)*
    - *Created CI/CD procedure to ensure code health and faster integration for testing and deployment (DevUp costs -70%)*
    - *Creating/modifying and managing 6 apps under the whole product …*
* **Rahpooyan: (Mar 2013-Sep 2015)**

As **full stack** developer I developed and kickstarted and multiple products based on multiple customer needs and descriptions.

* + - *Easybimeh.com (front-end) Improving system for example adding lazy loading and breaking services for better user experience* *(Efficiency +40%)*
    - *Wow.kanoon.ir (full stack) create and deploy full featured learning app to teach/test and give certificate for English learning (Creating revenue)*
    - *Visit24.ir (full stack) create and deploy 4 different parts whole startup to kickstart it and created the development team and mentored them to continue the work (Creating revenue)*
    - *Review (full stack) creation and deployment of video clip audio extraction and translation plus online subtitle creation (Creating revenue)*
    - *Choqok (full stack) creation and deployment of pdf modification and content adding system for teachers/ reviewers/ experts/ students (Creating revenue)*
    - *Multiple Crawlers for extracting information from different sites and Api for creating datasets and using them in different projects. (Creating revenue)*
    - *Apanajh (front-end) creating front end for Apanajh social media startup and create and mentor front-end team for them … (Creating revenue)*
    - *Multiple sites and application for various use cases*
* **Freelance Jobs /ISIRAN: (2012 to 2013)**

A Lot of front-end / full-stack project that I’ve done in that period mainly done with php/Laravel MySQL and VueJs AngularJs and some with Drupal, and after a while I got hired in ISIRAN and this was my first full time development job

* **Atlas-Offshore, Knauf Iran: (2008 to 2013)**

I worked as project planner / controller in mostly gas and oil projects , sometimes as team managers and leaders I Developed a lot of features and mini apps to perform their tasks and automate them , at some point I developed a whole reporting system that decreased the cost of procedure and man/hour about 50%

# educations and skills

* **University: B.A.** of **Industrial Eng.** fromUniversity of science and culture(Tehran, Iran)
* Aws courses, hours of online trainings
* Project management courses for MBA
* financial management courses
* Project planning and control courses