

---

## Muhammad Faisal

80809 Munich, Germany  
faiss.abdul@gmail.com  
m-faisal.de

**Nationality:** German



### Profile

Senior Solutions Architect and Technical Lead with 13+ years of experience across automotive, autonomous systems, aerospace, cloud, data and AI. Strong background in designing and delivering scalable distributed architectures spanning cloud, edge and embedded environments, including APIs, event-driven systems, data platforms, MLOps, observability, security and DevOps.

Experienced in translating complex business and technical requirements into pragmatic solution architectures, leading technical discovery and architecture discussions, and guiding multidisciplinary teams from early concept through implementation and production delivery. Combines deep technical expertise with customer-facing leadership, pre-sales and stakeholder management across complex international environments.

### Core Competencies

- Technical Leadership • Solutions Architecture (Delivery and Sales) • Business Development and GTM
- Process, Methods and Tools (PMT) • Program / Project Management (PMI / PRINCE2 / SAFe / Scrum) • AI / GenAI Adoption
- SDV / ADAS / Autonomous Driving • Verification and Validation (V&V): SIL, HIL, open-loop, closed-loop
- Machine Learning Operations (MLOps) / DevOps / Cloud Platforms / On-Prem
- Observability / Safety / Security / Compliance / FinOps

---

### Professional Experience

#### Capgemini Engineering - Munich, Germany

- Jan 2023 – Mar 2026  
**Senior Solutions Architect / Technical Lead**
- Led solution architecture across sales and delivery for ADAS V&V on AWS for a premium German OEM.
  - Owned high-throughput reprocessing and KPI computation for training and evaluation of AI-based functions.
  - Served as point of contact for monitoring, traceability, cross-application communication, and GenAI adoption.
  - Implemented SLA/SLO and observability baselines using Grafana, including dashboards, alerts and automated L1/L2 runbooks for large-scale workflows; also helped define and support FinOps practices.
  - Evaluated security and compliance against required norms and standards; applied the AWS Well-Architected Framework; enabled GitOps and designed progressive delivery patterns such as blue-green and canary deployments.
  - **Impact:** Successful SOP for a new vehicle. Enabled large-scale data processing of ~150k km/day at peak and ~3,000 parallel jobs in steady state; onboarded and provided delivery leadership for 22 people across 3 teams.
  - **Tech:** AWS (EKS, Batch, Step Functions, CloudWatch/OpenTelemetry, Lambda, SNS, SQS, EventBridge), Argo Workflows, Python, API Gateway, REST, IaC (SeedFarmer/CDK), GitHub, GitHub Copilot.
- Jan 2021 – Mar 2026  
**Senior Consultant**
- Drove internal and external delivery across automotive and aerospace; served as a senior member of the Autonomous Vehicle CoE and led the Process and Strategy team; defined team structures, OKRs, delivery architecture, playbooks, and GTM for SDV/ADAS, V&V, MLOps, Edge/IoT; supported partnerships, thought leadership, enablement, and recruiting, including activities at IAA, Hannover Messe, AD/ADAS, and AWS re:MARS.
  - Presented internally and externally on ethical and safety-related topics concerning AI / GenAI use in automotive and enterprise technology.
  - Designed and delivered on-prem and AWS/Azure solutions for premium OEMs and Tier-1s across internal initiatives, European research projects, and customer engagements.
  - **Impact:** Contributed to multiple €10M+ deals and €100M+ project wins and extensions.
- Jan 2022 – Mar 2026  
**Technical Project Manager**
- Planned and managed automotive programs (PMI / PRINCE2 / SAFe / Scrum); integrated schedules (critical path / resource planning); governance; stakeholder management, RACI, executive reporting (KPI/SLO dashboards); risk and commercial management, including Statements of Work (SOWs), Change Requests (CRs), budgeting and forecasting.
  - **Tools:** Jira/Confluence, MS Project/ProjectLibre, Kibana/Grafana.

|                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mar 2022 - May 2024<br>Process & Tooling Expert                                         | <ul style="list-style-type: none"><li>• Co-defined PMT for an OEM and Tier-1 collaborative platform (SAE L3+ AD/ADAS); lifecycle workflows aligned to ASPICE, ISO 26262, ISO/SAE 21434; playbooks, video tutorials, knowledge base; PMT Subject Matter Expert (SME) for cross-team interoperability.</li><li>• Delivered customer-facing training sessions and workshops on AI/GenAI tools, including Copilot-style workflows for engineering and delivery teams.</li><li>• <b>Tools:</b> Stages, GitHub Codespaces/Copilot, Confluence, Sphinx; docs-as-code (Sphinx, rST/MD) with style guide.</li></ul> |
| Jan 2021 - Jan 2023<br>Solution Architect                                               | <ul style="list-style-type: none"><li>• Architected an Azure-based MLOps platform (AML Workspaces) for a premium OEM, supporting multi-team model training and validation activities; implemented multi-tenant RBAC, MLflow/Model Registry, reusable AML pipelines, data ingestion, dataset versioning, data lineage; supported pre-sales activities including discovery, RFP/RFI responses, and demos.</li><li>• <b>Tech:</b> AML, Azure DevOps, Azure Storage/Data Lake, Python, Terraform (IaC), CI/CD, PyTorch, TensorFlow.</li></ul>                                                                  |
| Jan 2021 - Feb 2022<br>Technical Lead                                                   | <ul style="list-style-type: none"><li>• Led internal initiatives addressing automotive client needs across on-prem and AWS/Azure; created HLD/LLD, roadmaps, ADRs; data ingestion (batch / stream), lineage, API Gateway, REST/GraphQL, event-driven interfaces; Agile ceremonies and definition of done.</li></ul>                                                                                                                                                                                                                                                                                        |
| Aug 2020 - Mar 2021<br>Lead Developer<br>Stuttgart, Germany                             | <ul style="list-style-type: none"><li>• Led day-to-day operations of data-center infrastructure and analytics apps enabling V&amp;V of SAE L3 ADAS; improved PMT, KPI/reprocessing runtime, and UX; designed scalable open-loop reprocessing (parallelization / sharding, orchestration, queue / batch); implemented observability and runbooks; designed hybrid cloud migration PoC (AWS/Azure).</li></ul>                                                                                                                                                                                                |
| Altran (now Capgemini Engineering) – Munich / Hamburg / Lindau / Ulm / Sailauf, Germany |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Sep 2012 - Feb 2021<br>Advanced Consultant                                              | <ul style="list-style-type: none"><li>• Developed ADAS algorithms (BMW 7 Series, 5 Series; Rolls-Royce); validated ADAS for Toyota, Hyundai, Geely, Mitsubishi, Lynk &amp; Co. using V&amp;V (open-/closed-loop), HIL/SIL.</li><li>• Defined ADAS data management and reprocessing architecture (ingestion, dataset versioning, KPI computation); Airbus A350 XWB structural integrity/test-data tooling; consulting across OEMs/Tier-1s (BMW, Continental, Magna, Airbus).</li></ul>                                                                                                                      |
| Oct 2018 - Feb 2021<br>Technical Lead                                                   | <ul style="list-style-type: none"><li>• Technical and team lead for ADAS reprocessing and test data management platforms across on-prem and AWS.</li><li>• Designed and implemented architecture, components, interfaces, and tooling; managed scope, schedule, risk, and vendors.</li><li>• Built data ingestion and reprocessing flows with KPI computation; improved traceability; drove CI/CD, IaC, &amp; Agile ceremonies.</li></ul>                                                                                                                                                                  |
| Apr 2015 - Oct 2018<br>Test Engineer                                                    | <ul style="list-style-type: none"><li>• Validated camera-based lane marking and road-boundary detection algorithms across OEMs (BMW, Toyota, Hyundai, Geely, Mitsubishi, Lynk &amp; Co.); owned requirements, test process and tooling, ground-truth/annotation; coordinated multi-country test teams; built test automation and test data management; instrumented KPIs; aligned documentation to ASPICE / ISO 26262.</li></ul>                                                                                                                                                                           |
| Aug 2013 - Apr 2015<br>Algorithm Developer                                              | <ul style="list-style-type: none"><li>• Developed and optimized stereo-vision parametric road-model algorithms; foundation for Free Space Detection (FSD) and Object Detection (OD) in BMW and Rolls-Royce vehicles.</li><li>• Implemented and tuned FSD / OD pipelines for embedded real-time deployment, reducing latency and memory footprint.</li><li>• Collaborated with V&amp;V on ground truth and KPIs; delivered customer demos and documentation.</li></ul>                                                                                                                                      |

Skills

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                            |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Languages:                           | Urdu: Native<br>German: B2–C1 (self-assessed)                                                                                                                                                                                                                                                                                                                                                                                                          | English: Native<br>Hindi: Professional working proficiency |
| Certifications & Methods (Selected): | • PRINCE2 / PMT / SAFe / Scrum / Well-Architected Framework / ISO 26262 / ASPICE / MLOps / GitOps / FinOps                                                                                                                                                                                                                                                                                                                                             |                                                            |
| Tools and Technologies (Selected):   | • AWS (EKS, Batch, Step Functions, CloudWatch / OpenTelemetry) • Azure (AML, AKS, Azure DevOps, Storage/Data Lake) • Docker • Kubernetes • Infrastructure as Code (IaC) • Argo Workflows • GenAI / LLM: Claude Code, OpenAI Codex, GitHub Copilot • RAG • Agentic workflows • LLM/API integration • C++ • Python • API Gateway • APIs / REST / GraphQL • MLflow / Model Registry • Sphinx • Jira/Confluence • MS Project/ProjectLibre • Grafana/Kibana |                                                            |
| Interests:                           | • Endurance sports, hiking, running, photography, content creation, writing, cinema                                                                                                                                                                                                                                                                                                                                                                    |                                                            |

Education

Jacobs University, Bremen, Germany

|                     |                                                                                                                                                                          |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Jun 2010 - Aug 2012 | • Master of Science in Smart Systems. Final grade: 1.7 (German grading scale). Merit Scholarship recipient. Specialization in Automation, Robotics and AI.               |
| Sep 2007 - May 2010 | • Bachelor of Science in Electrical Engineering and Computer Sciences. Final grade: 1.8 (German grading scale). Merit Scholarship recipient. Focus on Computer Sciences. |