Izhar **ul Hassan**

LEAD · SCALE · DELIVER

Malmo, Sweden

📱 (+46) 72-537-5777 | ✉ izhar.hassan@pm.me | 🐙 ezhaar | 💼 ezhaar

"We are bound by our choices, but we are more than our mistakes."

Summary

- **Hands-on (Coding)** Solution Architect specializing in Data and Cloud Platforms with **15+ years** of experience.

- Strong background in **cloud-native**, **data-driven**, and **IoT edge** architectures, with deep expertise in both **Azure** and **AWS**.

- Experience delivering scalable, secure, and production-grade solutions across industries including **manufacturing**, **shipping**, **telecom** and **adtech**.

- Experience collaborating with **data science teams** to operationalize models and integrate analytics into end-to-end solutions.

- Actively expanding into **AI architecture**, with hands-on experience running local **LLMs**, exploring **RAG** pipelines, and experimenting with **MCP servers**.

- Passionate about bridging **AI** and **cloud engineering** to enable intelligent, scalable, and secure platforms.

Skills

Cloud	Azure, AWS, Google Compute, Openstack
DevOps and IaC	Terraform, Ansible, Kubernetes, Docker, Observability (Telegraf, Influxdb, Grafana, Loki), YAML
Data Engineering	Spark, Hadoop, Kafka, Streaming, time series, batch data, Jupyter
Programming	Python, bash
IoT and Edge	Linux, Yocto, Edge platform, IoT Hub, OPC UA, Modbus, Edge Gateways
Architecture and Design	Domain Driven Design, Microservices, C4 Architecture

Experience

Grundfos
Hybrid, Denmark

SOLUTION ARCHITECT - FREELANCE   *Jan. 2025 - Present*

- Designing scalable, cybersecure architecture for the **District Heating Optimization System**
- Leading **end-to-end** solution design and architecture
- Engaging with stakeholders to understand business requirements and define the architectural roadmap
- Integrating **pumping hardware** with the **Cloud** and **SCADA** via edge gateways
- Working with industrial protocols: **Modbus, OPC UA**
- Responsible for implementing **NIS2 and IEC 62443 compliance**, ensuring adherence to industry standards and regulatory requirements
- **Tech stack:** Azure, Python, Data, IoT, Integration, Solution Design, Cybersecurity

Alfa Laval
Copenhagen, Denmark

AZURE PLATFORM ARCHITECT (IOT)   *Sep. 2018 - Dec. 2024*

- Led the design and development of an **Azure-based data platform** enabling insights from industrial equipment
- Transformed a legacy connectivity solution into a modern cloud-native architecture, reducing delivery time for digital features
- Hired and trained core engineering teams for **edge** and **cloud** platforms
- Delivered end-to-end automation using **Terraform and Ansible**, improving deployment speed and operational consistency
- Worked on cybersecurity hardening of the edge-device stack
- Delivered metrics and monitoring stack **(Telegraf, InfluxDB, Chronograf)**
- **Tech stack:** Azure, Linux, Python, Streaming data, Docker, Ansible, Terraform, IoT

Novo Nordisk
Copenhagen, Denmark

AWS TECH LEAD - FREELANCE   *Mar. 2022 - Sept. 2022*

- Led the development of a predictive maintenance platform on **AWS**
- Developed scalable microservices and data pipelines using **Python, Lambda, S3, and Timestream**
- Applied Infrastructure as Code (CDK) and CI/CD using Azure DevOps
- Enabled visualization with **Grafana** for operational insights
- **Tech stack:** AWS, python, Lambda, Grafana, AWS Timestream, AWS CDK, Amazon S3

AP Moller-Maersk

Copenhagen, Denmark

LEAD AGILE DEVELOPER

Aug. 2017 - Aug. 2018

- Led a data engineering team migrating an on-premises data lake to Azure Cloud
- Designed a microservices-based data lake architecture for analytics and ML
- Built ingestion, storage, and archival strategies for high-volume data
- **Tech stack:** Azure, Python, Docker, Kubernetes, Kafka, Spark, Hadoop

Telia Sonera

Stockholm, Sweden

SOLUTION ARCHITECT

Mar. 2016 - Jul. 2017

- Built a multi-tenant, Kerberized data lake for telecom network data
- Developed data pipelines for crowd analytics and network data (probes, CDRs, IPTV)
- Optimized Spark jobs (achieved a 10× speedup for anonymization)
- Migrated workloads from MapReduce/Hive to Spark
- **Skills:** Hadoop, Apache Spark, Python, Solution Architecture, Cloudera

PDC Center for HPC, KTH

Stockholm, Sweden

RESEARCH ENGINEER

Jun. 2009 - Feb. 2015

- Supported and optimized parallel programming applications using **MPI**, **OpenMP**, and **CUDA** on PDC clusters
- Administered and operated the **Cray XE6** supercomputer (35,000+ cores)
- Managed installation, configuration, and maintenance of HPC software environments
- Designed and developed a monitoring and accounting dashboard for cluster jobs (**Django, MySQL, jQuery, HighCharts**)
- Collaborated with researchers to design, parallelize, and **optimize** high-performance applications
- Authored and maintained end-user documentation for HPC resources
- Delivered technical support and training workshops for new users and staff

Education

KTH, Royal Institute of Technology

Stockholm, Sweden

MASTERS IN SCIENTIFIC COMPUTING (COURSEWORK)

2008

- Specialization in High Performance Computing

National University of Science and Technology

Islamabad, Pakistan

BACHELORS IN INFORMATION TECHNOLOGY

2002 - 2006

- Focus on Algorithms and Data Structures