Izhar **ul Hassan**

SOLUTIONS ARCHITECT · IoT ARCHITECT · CLOUD ARCHITECT

Malmo, Sweden

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

Summary

- Solution Architect specializing in IoT, Cloud, and Data Platforms with **15+ years** of experience
- Experience delivering scalable, secure, and production-grade solutions across industries including manufacturing, shipping, telecom and healthcare
- Skilled in designing and leading IoT edge platforms, cloud-native microservices
- Hands-on with Azure and AWS cloud environments
- Experience with end-to-end architecture design

Skills

Cloud	Azure, AWS, Google Compute, Openstack
IoT and Edge	Edge platform, IoT Hub, OPC UA, Modbus, Edge Gateways
Architecture and Design	Domain Driven Design, Microservices, C4 Architecture
Data Engineering	Spark, Hadoop, Kafka, InfluxDB, Jupyter
Programming	Python, bash

Experience

Grundfos — *Hybrid, Denmark*
SOLUTION ARCHITECT — *Jan. 2025 - Present*

- Designing scalable, cyber-secure architecture for **District Heating Optimization System**
- Working with End-to-End IoT architecture design
- Working with Stakelders to understand business requirements and designing architectural roadmap
- Integration of **pumping hardware** to **Cloud** via Edge Gateways
- Working with Industrial protocols **Modbus, OPC UA**
- Integration of **Edge devices** to **SCADA**
- **Tech stack:** Azure, python, IoT, Industrial automation, Solution Architecture

Alfa Laval — *Copenhagen, Denmark*
IoT PLATFORM ARCHITECT — *Sep. 2018 - Dec 2024*

- Worked across business divisions to capture digital requirements and deliver scalable IoT solutions
- Designed and implemented End-to-End IoT platform with **microservices**
- Recruited and Trained IoT Development team from grounds up
- Integration into PLC solutions over Industrial protocols **OPC UA, Modbus, BLE**
- Developed device provisioning and commissioning workflows (Azure IoT Hub, Ansible, AWX)
- Implemented **Terraform, Ansible** for infrastructure automation
- Delivered metrics and monitoring stack (Telegraf, InfluxDB, Chronograf)
- **Tech stack:** Azure, python, Docker, IoT, Industrial automation, Solution Architecture

Novo Nordisk — *Copenhagen, Denmark*
AWS TECH LEAD — *Mar. 2022 - Sept. 2022*

- Architected predictive maintenance platform leveraging AWS Lambda, S3, Timestream, SQS
- Developed scalable microservices and data pipelines
- Applied Infrastructure as Code (CDK) and CI/CD with Azure DevOps
- Enabled visualization with Grafana for operational insights
- **Tech stack:** AWS Lambda, Grafana, AWS Timestream, AWS CDK, Python, Amazon S3

AP Moller Maersk

Copenhagen, Denmark

LEAD AGILE DEVELOPER

Aug. 2017 - Aug. 2018

- Led data engineering team migrating on-prem Datalake to Azure Cloud
- Designed microservices-based Datalake 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 multi-tenant Kerberized Data Lake for telecom network data
- Built Data Pipelines for Crowd Analytics, Network Data (probes, CDRs), IPTV
- Optimized Spark jobs (10x 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