

Mohsen Amiribesheli, PhD

AI Lead, Senior Technical Architect

📍 London
☎ +447428521592
✉ mo@besheli.com
🌐 besheli.com

Summary

Mohsen is at the forefront of machine learning innovation, specialising in the strategic application of Generative AI to solve complex business challenges. With a PhD in AI and extensive tenure in the industry, Dr Amiribesheli leads the deployment of AI/ML operations, emphasising scalable and efficient machine learning workflows. He has been pivotal in implementing AI solutions, significantly enhancing process efficiency and innovation, particularly in manufacturing, FinTech, and life sciences.

His work includes orchestrating sophisticated MLOps pipelines and integrating large language models within enterprise ecosystems, bolstering automated model generation and advanced analytics. As a principal investigator, he spearheaded a hybrid cloud network service orchestrator for 5G networks, crucial for deploying scalable real-time AI applications. Committed to knowledge transfer, Dr Amiribesheli has also shared his expertise through teaching and multiple scientific publications, further advancing the understanding and application of AI across academic and industry spheres.

Work experience

AI Lead, Gen AI Labs

May 2022 - Current

HCL Technologies, [Based in London, Global]

- Lead AI activities in Gen AI Labs, driving the development and implementation of cutting-edge AI solutions for various projects.
- Serve as a Senior Technical Architect for Cummins applications modernization/migration, providing expertise in designing and implementing scalable and efficient solutions.
- Create MLOps and AIOps roadmaps for HCL Solutions and products, leveraging AWS, Azure, and GCP to optimize AI operations and enhance overall performance.
- Architect AI solutions for Stanley Black & Decker, leveraging advanced technologies to enhance operational efficiency and drive business growth.
- Serve as a Principal AI Consultant for Kaiser Permanente projects, providing expert guidance and solutions to improve healthcare outcomes through AI.
- Act as an AI Architect and Advisor for SGX, developing innovative AI solutions to optimize financial operations and improve decision-making processes.
- Design and implement MLOps solutions for Under Armour, ensuring efficient deployment and management of machine learning models.
- 100+ CTO, CIO and CEO AI advisory sessions

R&D Technology Lead / R&D Technology Manager

April 2020 - May 2022

Konica Minolta Inc, [London and Rome]

- KM Cloud Orchestrator Lead (<https://youtu.be/5kX8fKkawY4>) **ETSI OSM, OpenStack, VMWare VSphere, Azure**
- Managing a team of Research and Development (R&D) engineers in the area of Cloud Computing and AI in London and Rome. Hybrid Cloud Team in London and Edge AI team in Rome.
- Design and development of a Cloud Orchestration tool specialised for Machine Learning pipeline.
- Hiring and retention planning for both teams.

- Software Product delivery in the USA, Italy, Canada and the UK markets. Verticals (Cloud), Distributed Manufacturing, and Data Visualisation) **AWS, Azure, OSM, Kubernetes**
- Creating the MLOps and AIOps roadmaps of Konica Minolta R&D. Including **AWS, Azure, GCP**
- Designing a Private Blockchain strategy for Konica Minolta in collaboration with 3rd-party BC companies.
- Konica Minolta Principle investigator in the publicly funded project called Distributed Manufacturing for Off-side construction (£1.4m investment) **Terraform, Kubernetes, Azure, Istio**
- UK Principle investigator of the Publically funded project called AINET-ANIARA. Leading Work Package one of the International project (Euros 14m) **Azure, Private 5G, Industrial Manufacturing**
- TRL7 delivery of KM Orchestrator for industrial IoT <https://youtu.be/O8aYIsHy0YE> and Resource Orchestration in PMN (Private Mobile Network) and Hybrid cloud settings.
- Managing and Designing a Late-Stage AIOps product for Computer vision applications. **Apache Spark, Superset, and Kubernetes**

Research Specialist – Hybrid Cloud Solutions

April 2019 - April 2020

Konica Minolta Global R&D, London

- Designing (Micro) Service-Oriented Architecture for "Distributed Cloud Intelligence" project. **OpenStack, Kubernetes, Istio.** <https://youtu.be/ta6lIMCPhOM> **KCL, FBK Italia**
- Designing implementing Cloud Native applications Container, Service Mesh, Microservices, Immutable infrastructures, Declarative Infrastructure for a Computer Vision solution.
- Devising Hybrid Application, Hybrid Infrastructure, Hybrid Orchestration roadmaps
- Writing DMOC and Aniara bid proposals. (both successful)
- Designing the Private Mobile Network Roadmap of KM
- Designing EdgeAI roadmap of the KM

Technical Specialist - Smart Systems (Artificial Intelligence)

May 2018 - May 2019

Konica Minolta Laboratory Europe (Sub-division of Global R&D), London

- Designing and Deploying AI Pipelines on Hybrid Cloud for ML applications.
- Container Design and Orchestration for CV and Robotic Applications (i.e., Kubernetes)
- Software-Defined Networking (e.g., Open Daylight, Open vSwitch)
- Ambient Intelligence (e.g., IoT) for people counting application
- Hybrid Cloud- Cloud Robotic ROS (Robotic Operating System)
- Edge Intelligence- AI pipeline <https://youtu.be/O8fYxvsBY18>
- Program member of International IEEE Intelligent Environment conferences

Program Leader for BSc in Computing

March 2017 - May 2018

North East Surrey College of Technology

- Designing, managing, and teaching the level 4, 5, 6 units including Computer Networking (L2/L3, L7 and Software Defined Networking), Virtualisation (Hypervisors, Containers, and Orchestration), Maths for Computing (Maths for Data Science), Data Base Management Systems (SQL), Network Security.
- Fellow of UK Higher Education
- Performing Research as a guest researcher at Machine Intelligence Group
- Being involved in designing and delivering HE apprenticeships
- Program member of International IEEE Intelligent Environment

PGR Researcher / Computing Demonstrator

Sept 2013 - March 2017

Bournemouth University

- Conducting a series of research studies on Pervasive Computing and the Internet of Things
- Implementing projects employing (Java, PHP, Python)
- Employing machine learning algorithms
- Employing the latest requirements engineering techniques
- Employing the latest Human-Computer Interaction concepts for complex systems
- Program member of International IEEE Intelligent Environment conferences
- Teaching Media Devices & Networks Labs, Java Programming Labs, Digital Forensic Fundamentals Labs, Business & Professional Issues Seminars, Web Information Systems Seminars
- Supervising Undergraduate and Postgraduate thesis
- President of Bournemouth University IEEE branch
- Data Lab Workshop Tutor (Google Refine/Google Cloud)

Core Competencies

- **AI/ML Strategic Implementation:** Skilled in leading the deployment and operationalization of AI/ML frameworks, enhancing business innovation across diverse sectors.
- **Generative AI Innovation:** Expert in designing and deploying generative AI systems that enhance creativity and problem-solving in product and service development.
- **Data Strategy and MLOps:** Proficient in pioneering data migration strategies, optimizing datacenters for digital transformation with a strong emphasis on MLOps.
- **AI Integration in Modernization:** Specialized in integrating AI to modernize applications, transitioning legacy systems into intelligent and adaptive solutions.
- **Multi-Cloud AI Deployment:** Experienced in crafting robust multi-cloud and hybrid AI solutions, ensuring adaptable and resilient infrastructures for AI applications.
- **AI Thought Leadership:** Founding AI Centers of Excellence, driving AI research, and fostering a culture of innovation and cross-disciplinary collaboration.
- **AI Solution Architecture:** Competent in creating and implementing industry-leading AI and MLOps architectures, significantly advancing operational effectiveness.
- **Advocacy and Governance:** Championing AI governance, ethical AI usage, and advocating for responsible AI practices in business operations.
- **Technical Communication:** Effective in communicating complex AI concepts to technical and non-technical stakeholders, aligning business objectives with AI capabilities.

Education

Doctor of Philosophy (PhD), Computing - Intelligent Environments (ML)

2013 - 2017

Bournemouth University, UK

Thesis: Tailored Smart-home for Dementia care

Master of Science (MSc), Computing; International Business

2011 - 2012

The University of Dundee, UK

Dissertation: "Studying various visualisation methods for a telecare system tailored for people with chronic obstructive pulmonary disease."

Bachelor of Science (BSc), Computer Software Engineering

2006 - 2011

Azad University (IAU), Iran

Selected Publication

1. *Expediting Konica Minolta's Digital Transformation: AI-enabled Orchestration of Modern Workload and Software-Defined Infrastructure from Edge to Cloud* **KM tech review 2022**
2. *Evolving 5G: ANIARA, an Edge-Cloud perspective*, CF '21, May 11–13, 2021, Virtual Conference
3. *DISTRIBUTED CLOUD INTELLIGENCE: PUSHING IT INFRASTRUCTURE TO THE EDGE*, 2020 White-paper
4. *Distributed Cloud Intelligence: Implementing An ETSI MANO-Compliant Predictive Cloud Bursting Solution using Openstack and Kubernetes*, 2020
5. *Cloud Edge: Optimal Orchestration of Intelligence in a Hyperconnected Era*, 2019 White-Paper
6. *A tailored smart home for dementia care*, 2018, Ambient Intelligence and Humanized Computing
7. *Towards dementia-friendly smart homes*, 2016, IEEE Compsac
8. *A review of smart homes in healthcare*, 2015, Ambient Intelligence and Humanized Computing
9. *Tuberculosis disease diagnosis using artificial immune recognition system*, 2014, International journal of medical sciences

Certifications (summary)

- AWS Certified Solutions Architect - Associate, Jan 2023
- Txture Cloud Transformation - Associate, 2022
- Google Anthos, 2021
- AIOps Essentials (Autoscaling Kubernetes with Prometheus Metrics)(Linux Academy) 2019
- Fellowship, UK Higher Education Academy (2018) **FHEA**
- Introduction to Data Science (University of Michigan) 2017
- Machine Learning Summer School (University of Madrid) 2014
- Microsoft Certified Technology Specialist (Microsoft) 2010

