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To: Dr. Ali Diba (Scientist, QCRI)
adiba@hbku.edu.qa

Dear Dr. Diba,

I am writing to express my interest in the remote research/internship opportunities at QCRI focused on multi-modal foundation models for crisis and disaster management. I am a PhD candidate in AI at Amirkabir University of Technology (AGML Center) with an MSc in AI from USI (Lugano). My research bridges agentic AI systems with knowledge graph construction, and I have hands-on experience in ML/DL engineering (PyTorch), backend services (FastAPI), and deployment (Docker).

My current line of work investigates agentic AI for Knowledge Graph Construction (KGC) using dual-learning validation loops (graph-to-text/text-to-graph) to reduce hallucinations. I also study time-series and imaging data via graph learning; our ASD-GraphNet paper demonstrates fMRI-based autism diagnosis (Computers in Biology and Medicine, 2025; doi:10.1016/j.compbiomed.2025.110723). Building on this, Im particularly excited about combining VLMs/VLAs with structured knowledge (GraphRAG-style retrieval over crisis knowledge graphs) to deliver trustworthy situational awareness, attribution, and audit trails for humanitarian response.

I would be glad to contribute to QCRI projects at the intersection of VLMs/VLAs, social media streams, satellite/aerial imagery, and structured knowledge integration. I bring both research depth (designing agents, KG validation, XAI/uncertainty) and engineering pragmatism (data pipelines, APIs, evaluation). I would welcome the opportunity to discuss fit and potential directions (e.g., KG-enhanced VLM grounding, temporal event graphs for crises, explainable triage and prioritization).

Thank you for your time and consideration. I have attached my CV and a brief research interest note. I would be delighted to collaborate as a remote intern or research collaborator.

Sincerely,

Amirehsan Davoodi