

## SDAIA-KFUPM Joint Research Center for Artificial Intelligence

SDAIA-KFUPM Joint Research Center for Artificial Intelligence (JRC-AI) was recently established at KFUPM to advance the research in the field of Artificial Intelligence (AI). The center aims to establish the Kingdom as a global leader among the league of data-driven economies by conducting and supporting research and innovation in AI, developing use-cases and solutions in accordance with the Saudi National Strategy of Data & AI to achieve the Kingdom's vision 2030. The center will be home to faculty and researchers from various departments, including Computer Science, Computer Engineering, Electrical Engineering, Systems Engineering, Math, Physics, and many other departments.

The center will address various problems in the field of AI including machine learning, deep learning, reinforcement learning, representation learning, learning theory, resilient AI, and explainable AI, Natural Language Processing, and Bioinformatics. In addition, the center will focus on applications of AI in two areas: Oil and gas, and Energy and Utility. In the oil and gas field, JRC-AI will focus on the application of AI in the oil and gas exploration and production pipeline including, but not limited to, seismic acquisition and processing, data compression and enhancement, seismic interpretation and inversion, reservoir characterization, real-time drilling, fault detection and risk assessment, production optimization, modeling and simulation, and site security and safety monitoring. On the energy and utility front, JRC-AI will focus on research on energy generation, monitoring, scheduling, forecasting, efficiency, and control for conventional, renewable, and hybrid power systems.

The center research activity aims to develop the projects it undertakes into Proof-of-Concept (POC) and Minimum-Viable-Product (MVP), in addition to establishing a presence in global academic venues in the fields of its expertise. In addition, the center aims to attract, support, and train talent in the Kingdom in the field of AI by developing and conducting training programs for young talent, academic faculty, and executives.

For more information contact the acting Director of SDAIA-KFUPM Joint Research Center for Artificial Intelligence (JRC-AI), Dr. Motaz Alfarraj, at [jrc-ai@kfupm.edu.sa](mailto:jrc-ai@kfupm.edu.sa)