Research Interest

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1. Intelligent Supervision Centralised System

**Main Research objectives**:  
• Simulate and build user-friendly Intelligent control and monitoring system for oil pipelines grid to decrease environmental and financial losses whilst achieving better communication.

**Motivations**:  
• Appreciate the oil pipelines transmission process through visual simulation from source to destination.  
• Reduce the waste in resources.  
• Provide visual monitoring system for the transportation process.  
• Evaluate and analyse the parameters affecting oil pipelines transmission grid.
Neuro-fuzzy Supervision System in Oil Pipelines Grid

User-friendly Intelligent control and monitoring system
Simulation in Simscape software package

2. Intelligent Supervision local System

**Main Research objectives:**
Create Supervision System in Micro Grid electricity stations with the Support of Artificial Intelligence and Internet of Things (IoT).

• **Motivations:** Better service quality in Micro Grid electricity stations.
3. Diagnosing System

Main Research Objectives:
Simulate and test the diagnosing system according to Electrocardiograms (ECGs) Readings. The Cardiology Diagnosing System is an effective learning technique based on big data analysis (patient records).

Motivations:
• Help in healthcare to reduce diagnostic and therapeutic errors that are inevitable in human clinical practice.
• Provide value to healthcare by improving healthcare quality and outcomes. It also provides affordable care.
• Enables delivery of cost-saving by eliminating inefficiencies.
Diagnosing System according to Electrocardiograms (ECGs) Readings