AI applications in engineering

#YESI
PL-UK YEAR OF ENTREPRENEURSHIP SCIENCE AND INNOVATION

UNIVERSITY OF WEST LONDON
The Career University

Research Interest

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BRITISH COUNCIL | 80 YEARS IN POLAND

British Embassy Warsaw

Ministry of Science and Higher Education
Republic of Poland

1. Intelligent Supervision Centralised System

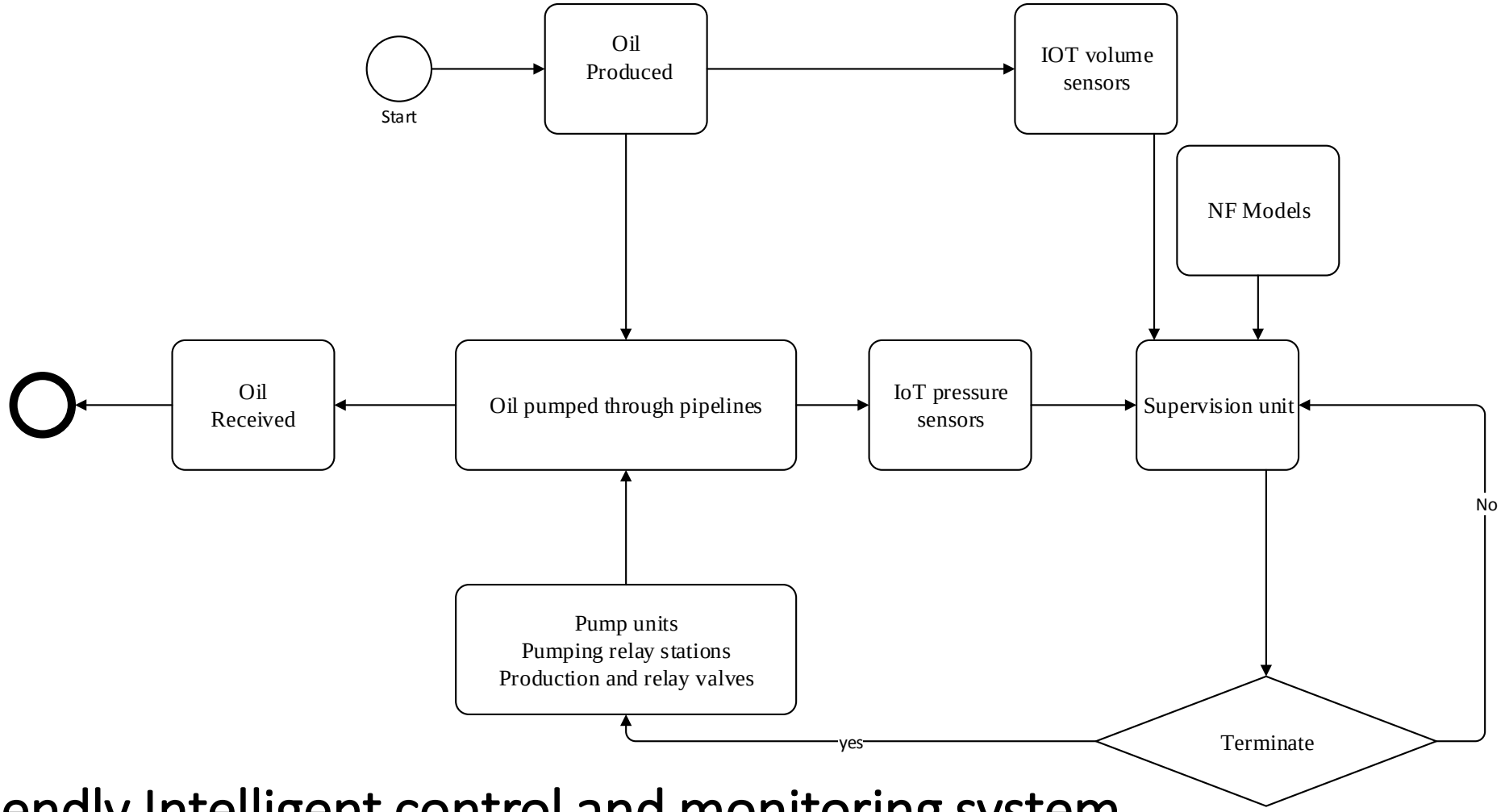
Main Research objectives :

- 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 :

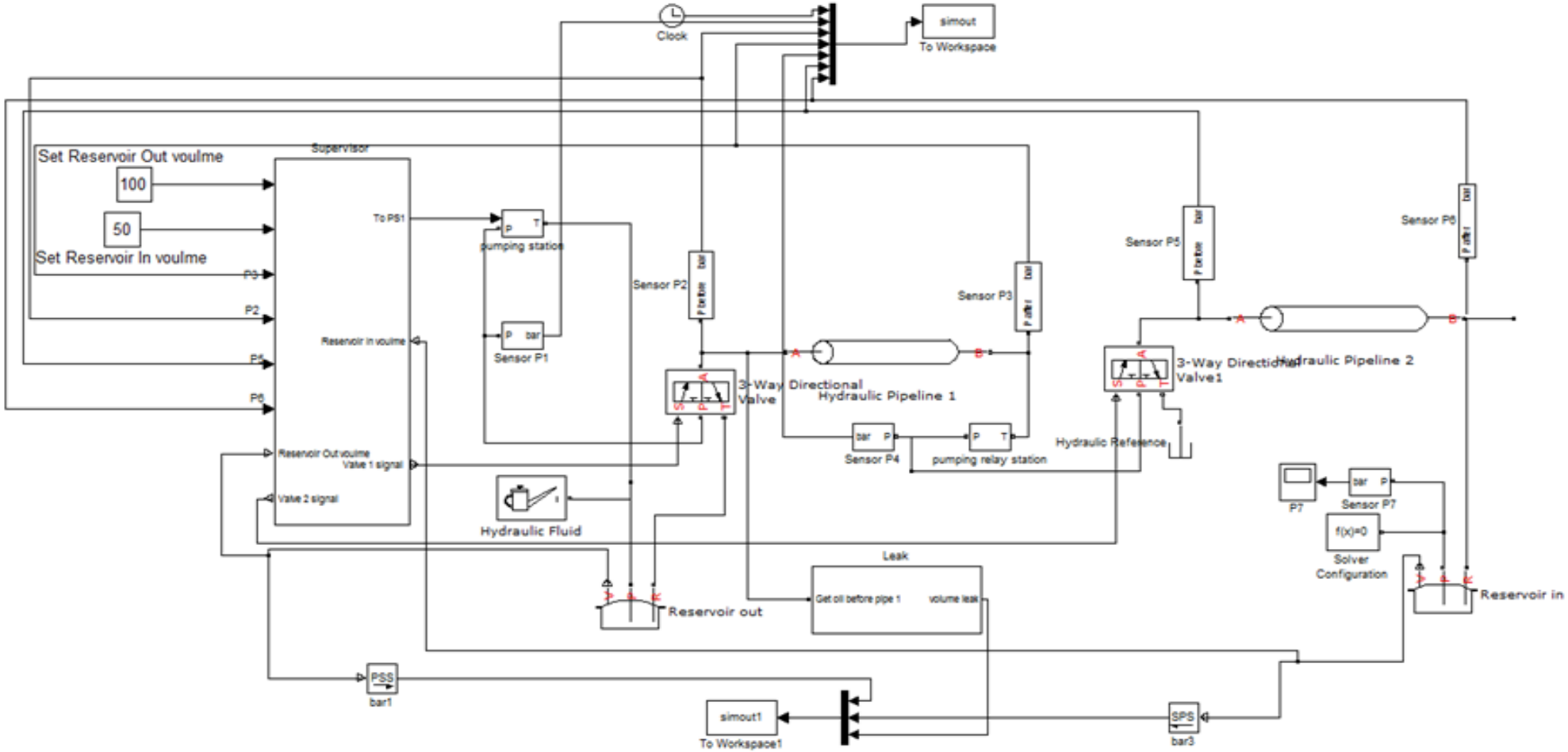
- Appreciate the oil pipelines transmission process through visual simulation from source to destination.
- Reduce the waste in resources.
- Provide visual monitoring system for the transportation process.
- Evaluate and analyse the parameters affecting oil pipelines transmission grid.

Neuro-fuzzy Supervision System in Oil Pipelines Grid



User-friendly Intelligent control and monitoring system

Simulation in Simscape software package



Nagham H. Saeed and Maysam F. Abbod, "Modelling Oil Pipelines Grid: Neuro-fuzzy Supervision System", *International Journal of Intelligent Systems and Applications (IJISA),* Vol.9, No.10, pp.1-11, 2017. DOI: 10.5815/ijisa.2017.10.01.

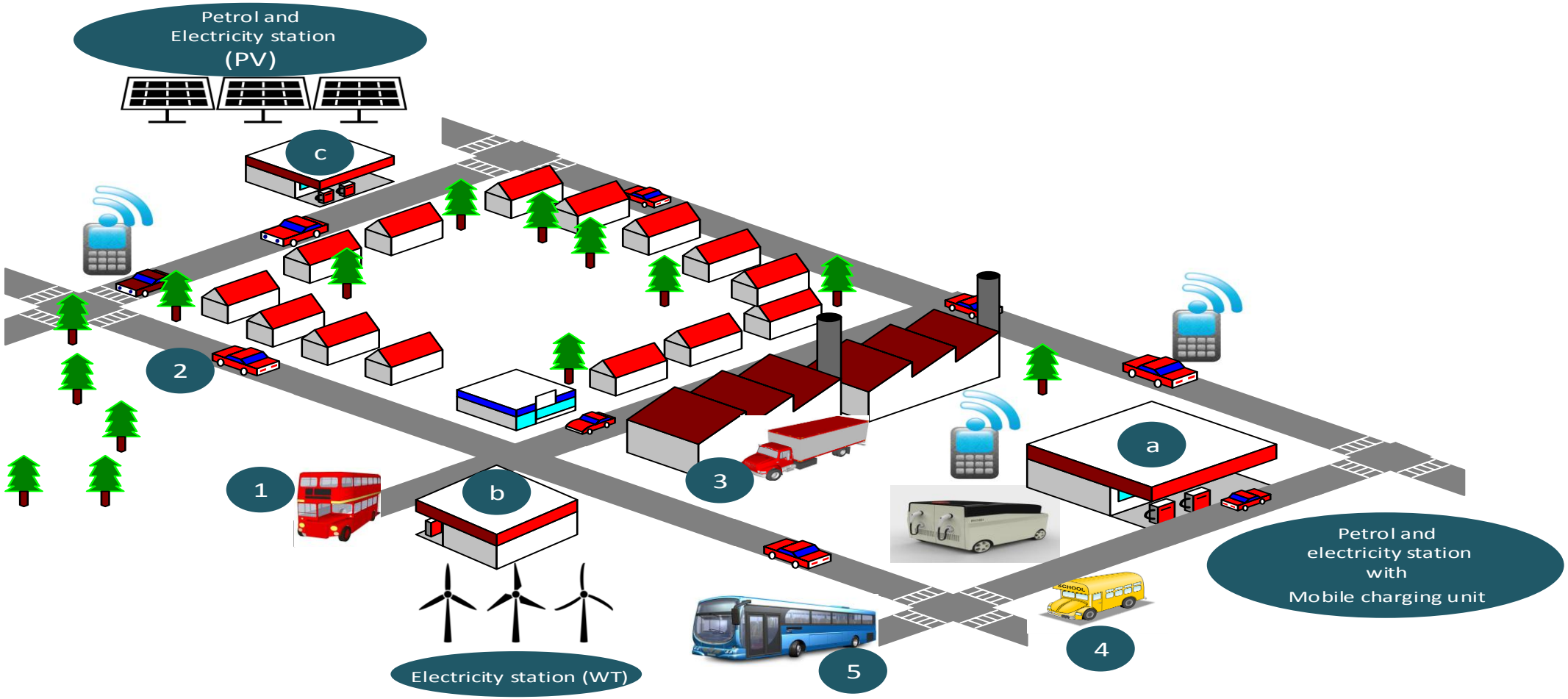
2. Intelligent Supervision local System

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.

Renewable Energy 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