Heart Attack Prediction (using Transfer Learning)

Introduction: Heart Attack is a major global issue, and early detection is key, Doctors use ECGs to monitor heart activity, but analysing them can be time consuming, and subtle signs may be missed, Al helps improve the speed and accuracy of ECG analysis. CNNs, known for recognizing patterns, can be trained to spot key features in ECG images. Using transfer learning with ResNet50, we fine-tuned a model to classify heart conditions.

Pattern:

- -Using a small data set from <u>ECG Images dataset of</u> <u>Cardiac and COVID-19 Patients - Mendeley Data</u>.
- _Using transfer learning with ResNet-50 to detect edges.

Goals:

- -Improve human analysis.
- -Pattern recognition.
- -Consistency.
- -Continuous learning.

Related work:

- A CNN and ResNet 50 Approach to Detect Cardiac Diseases using ECG Images
- Application of Deep Learning for Heart Attack
 Prediction with Explainable Artificial Intelligence