Fetal distress before and during childbirth indicating that the fetus has been receiving inadequate oxygen. Cardiotocography monitors two vital parameters, i.e Fetal heart rate (FHR) and uterine contractions (UC). These time series data and can be used to detect fetal distress. Goal: a system that takes these two time series data as inputs and classifies them as "Distress" and "Normal" Source data: <https://physionet.org/physiobank/database/ctu-uhb-ctgdb/> Methods of processing could include Support Vector Machines/ Principal Component Analysis or any other method of choice that discriminates the best. Problem: <https://drive.google.com/open?id=18oYVdQHq6Jo-9blXCpQwy3g-HBZzErGL>

<https://www.youtube.com/watch?v=_ROHhPvQsK0&t=7s>

The most painful thing for any mother is losing her child. There are some cases which may lead to the death of the baby before birth. Fatal distress is one of them. Thanks to technology and advanced computation power using which we can develop many models through which we can find and predict the occurrence of anything fatal. Using Machine Learning which is really a boon of Latest advancements in technology we can do tasks unmanned and that too with high accuracy in prediction. Using Neural Networks (R-CNN) we can train a model that could detect any anomaly in the time series data from Cardiotocograph using FHR and Uterine Contraction variations. The training could be done using the open datasets from Physionet.org database. Then the trained model could be deployed using a Raspberry Pi and could be extended by adding web Interface and an Android Application.

Tsunami is one of the most dangerous natural disasters which can cause a lot of damage to infrastructure and may lead to the death of lakhs of people. Thanks to satellite communication and Artificial Intelligence, we can build an AI model which is trained to detect the occurrence of the Tsunami using the images taken from satellites when the Tsunami occurred in the past. So the perfectly trained model could be used by passing it with time series images from the satellite and come to know before the Tsunami really occurs and warn the people by using their GPS data. This model can give an accurate prediction about the occurrence of the Tsunami and could save the lives of millions of people.

Chromatographic matches are one of the most complicated ones that need highly skilled people to predict the perfect match. This could be made very easy using a trained Convolution Neural Network model with a dataset with previous results with results labeled. This could accurately predict if the output is a perfect match with the reference standard with great accuracy. This image recognition technique being very light could be deployed at any place for any task that needs a high accuracy in prediction very easily with low cost and power.