# Warp n Weft of Al

Eligibility: IX-XII

## What to expect:

- Introduction of concepts in AI to young enthusiasts, and guidance to succeed from beginner to an amateur level.
- Statistical learning
  - Regressions
  - Error Analysis (R-squared, RMS, etc.)
- Neural networks
  - Gradient Descent
  - Backpropagation
  - Loss Functions and Optimizer Basics
  - Error Analysis (Gauss Error Function)
  - Dense Layers
- Hands-on work throughout the course. Yellow Submarine and Python will be used in display for the same.

### **Certification/Reward**

In a suitable point in time during the course, the participants will be given the task of writing a 'Review Paper' on Artificial Intelligence under the bounds of what has been taught and further research around the same topics. A detailed help sheet, covering how to do the same (with suggested resources) will be provided at the same time. Website: shows flow of execution of plan

On the basis of the submitted Review Paper, a total of 3 students (per grade) will be awarded with "Excellence in Structural Basics and Growth Analysis of Artificial Intelligence".

#### **Durations and enrolment details**

In a run of 3 days with 2 batches per day, the course will be completed and submitted Review Papers will be evaluated for drafting the certificates. A rate of 2 hours per day will be followed and the organizers will swap their places at the first hour, between the two running batches.

## **INTER WARTEX**

According to density of participants, it will be decided if the two batches are split between the same grade or different grades.

("grade" refers to the school year you're in)

#### Note:

- Last day to register is 15<sup>th</sup> Jan
- Event is on 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> Jan

### **Event Headed by:**

Aaryamitra Pateriya Pranat <u>Sharma</u>

## For Contacting:

developers.yellowsubmarine@gmail.com

## INTER WARTEX