## LIST OF TERMS

Terms	Definition
Depression Detection	The process of identifying signs and symptoms of depres-
	sion using various methods including clinical interviews,
	questionnaires, and computational techniques.
Meta-heuristic Algorithm	A sophisticated strategy or technique employed to dis-
	cover, generate, or choose a heuristic (a partial search
	algorithm) capable of delivering a sufficiently effective so-
	lution to an optimization problem, particularly when fac-
	ing incomplete data, imperfect information, or restricted
	computational resources. Examples of these strategies in-
	clude simulated annealing, genetic algorithms, and Grey
	Wolf Optimization (GWO).
Classes	Categories or groups in a dataset that represent different
T1	types of data points or labels.
Fine-tuning	The process of taking a pre-trained model and making
	small adjustments to improve its performance on a spe-
The contract of the contract o	cific task.
Transformer	A form of neural network architecture that utilizes self-
	attention mechanisms for handling sequential data. It is
	extensively applied in tasks related to natural language processing.
Optimization Algorithm	A method used to find the best possible solution or out-
•	come in a given problem space.
Hyperparameters	Parameters in machine learning models that are set be-
	fore the learning process begins, such as batch size, learn-
	ing rate, and the depth of layers in a neural network.
Pre-trained Model	A model that has been previously developed on an ex-
	tensive dataset and is adaptable for specific tasks.
Epoch	A single full cycle through the entire training dataset
	during the training process of a machine learning model.
Overfitting	A scenario where a machine learning model excels on the
	training data but struggles with new, unseen data due to
	excessive complexity.