

**Network Architecture:** The model consists of 3 hidden layers, each using the ReLU activation function, and a final sigmoid activation layer to handle binary classification.

**Loss Function:** Binary Cross-Entropy Loss was used for optimizing the model's predictions.

**Optimizer:** The Adam optimizer was selected, with a learning rate set to 0.001 to facilitate efficient training.

**Evaluation Metrics:** The model's performance was evaluated using Accuracy, Precision, Recall, and F1-Score metrics.

**Challenges:** Managing potential overfitting or underfitting required adjusting hyperparameters and considering regularization techniques.