**AI Tools and Applications Project Report**

This project explores the use of artificial intelligence frameworks in real-world problem solving, focusing on the practical implementation of TensorFlow and Streamlit. The objective was to build and deploy an AI-powered web application capable of processing data and providing intelligent insights through a user-friendly interface.

The project was divided into three major parts. In Part 1, we explored theoretical aspects of AI tools, understanding their functions and how they apply to different domains. Part 2 covered the practical implementation, where we developed and tested a Streamlit-based application that integrates TensorFlow models. This part included setting up the environment, importing necessary libraries, cleaning and processing data, and deploying the app for end-user interaction. Part 3 focused on ethics and optimization. We examined fairness issues in AI systems using tools such as TensorFlow Fairness and spaCy, identified and resolved bugs related to TensorFlow input shapes and activation functions, and applied optimization techniques including ReLU activation, Dropout layers, and the Adam optimizer to improve model performance.

The project highlights how AI frameworks can be combined to create scalable and ethical AI solutions. The Streamlit app serves as a demonstration of how theory, practice, and responsible development principles come together in modern AI projects. This report will be shared as an article in the community for peer group review and included in the GitHub repository for collaborative feedback and improvement.