

ABSTRACT

Pancreatic cancer is a tough challenge in cancer care, known for its aggressive nature, limited treatment options, and poor outlook. Detecting and classifying pancreatic tumors accurately and quickly is crucial for improving patient outcomes. This project focuses on using advanced machine learning techniques to classify pancreatic tumors better. We're using the Tensorflow library to build a deep learning model that analyzes medical images of pancreatic tissue. Our approach involves carefully selecting and preparing data, choosing the right model, training it thoroughly, and evaluating its performance rigorously. We're also using sophisticated techniques like transfer learning with architectures like InceptionResNetV2 to improve the model's accuracy. Plus, we're introducing a new method that combines AX and InceptionResNetV2, achieving an impressive 99% accuracy in testing. Our goal is to make pancreatic cancer diagnosis more accurate, leading to better treatment decisions and, ultimately, improved outcomes for patients.