**Plant Classification**

SE-2-14

By: Fadi Amon; fadiam@ac.sce.ac.il  
 Rasheed Abu Mdegem; rasheab1@ac.sce.ac.il

Advisors: Dr. Irina Rabaev, Dr. Marina Litvak

Shamoon College of Engineering, Beer-Sheva

Identifying rare desert plants remains challenging due to the unavailability of large datasets with rare species. As of today, classical deep-learning models require a lot of training data. To address this issue, this project aims to develop a plant classifier using a Neural Network model using a Few Shot Learning (FSL) method. FSL is particularly known for it’s effectiveness on small datasets, hence the FSL is employed to train the neural network on a small dataset, resulting in high accuracy percentages for classifying these elusive plants.

**Keywords:** plant classification, small database, neural network, rare desert plants, Few Shot Learning (FSL).