



SPARK End-Term Report

Supervisor – Prof. Alok Bhardwaj

Intern Name – Abdul Rehman

**Institute Name – Sant Longowal Institute of Engineering
and Technology, Deemed University**

Joining Date – 06/06/2022

Category – National

SPARK ID – SPA2202882

**Department – Mehta Family School of Data Science
and Artificial Intelligence**

**Project Title – Identification of flood extents in
SAR images**

Spark End-Term Report(100 words)

Week 5: The intern worked on the poster, which included SAR images and results based on the previous work. Intern also included the study area, data, methodology, and results. Conclusions were made based on those results.

Week 6: Worked on different CNN models and applied efficient Net from B0 to B7 based on the image-net dataset to classify a given image.

Week 7: The intern worked on a single SAR image and was able to determine the sweet spot of the threshold of buildings in an urban flooded image. In that particular image that threshold was 150.

Week 8: Intern worked on the transformation of SAR image from grayscale to 3 channel image by several methods which includes adding additional channels to each grayscale image and Modifying the first convolutional layer of the pre-trained network.