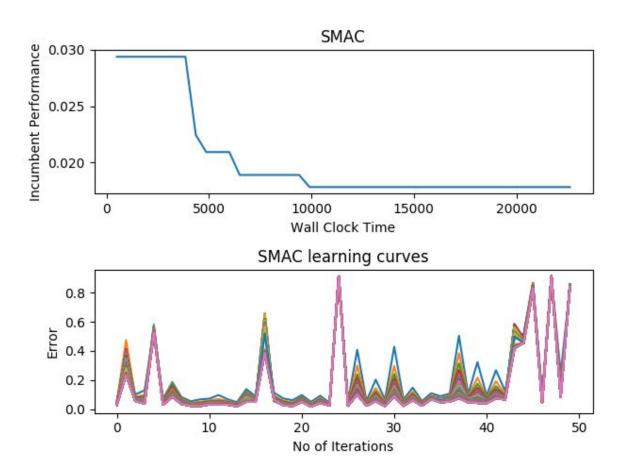
Name: Sameed Hayat

**Matriculation Number**: 4254137

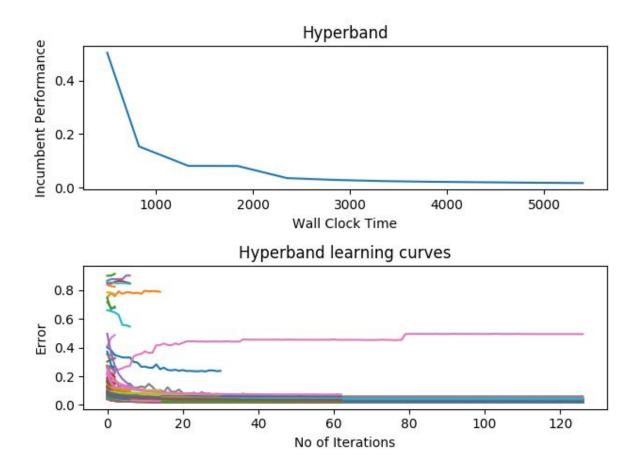
# Deep Learning Lab Course Machine Learning and Computer Vision Track Exercise 6

I have implemented the configuration space which defined the bounds and types of each hyperparameter. I have used SMAC to find a good hyperparameter configuration and Hyperband to speed up the process. Given below are the plots obtained by using the given approaches

# **SMAC**



#### **HYPERBAND**



## **Performance Comparison**

- Hyperband reached optimal point quicker than the SMAC.
- Hyperband performance curve was also smoother than SMAC

### **Learning Curves Comparison**

- Hyperband has lower number of curves than the SMAC.
- Hyperband tend to decrease the error quicker than SMAC.
- SMAC is fluctuating more than the Hyperband