

# STTAI-Assignment6-Reproducibility-HPO

[GitHub Link](#)

Team 25

Members:

Name	Roll Number
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## Introduction

The goal of this assignment is to learn about experiment tracking, version control, and reproducibility in machine learning workflows. You will set up experiment tracking using Weights and Biases.

## Section 1: MLP Model Implementation & Experiment Tracking

In file **Section1.ipynb**

Screenshots

Model architecture, Hyperparams, logged metrics

romit-mohane01-llt-gand... > Projects > 2x\_mlp-iris > Table

Romit Mohane

romit-mohane01-llt-g...

Romit-mohane01's workspace

Personal workspace

Runs (10)

Search runs

Filter Group T4 Sort New sweep

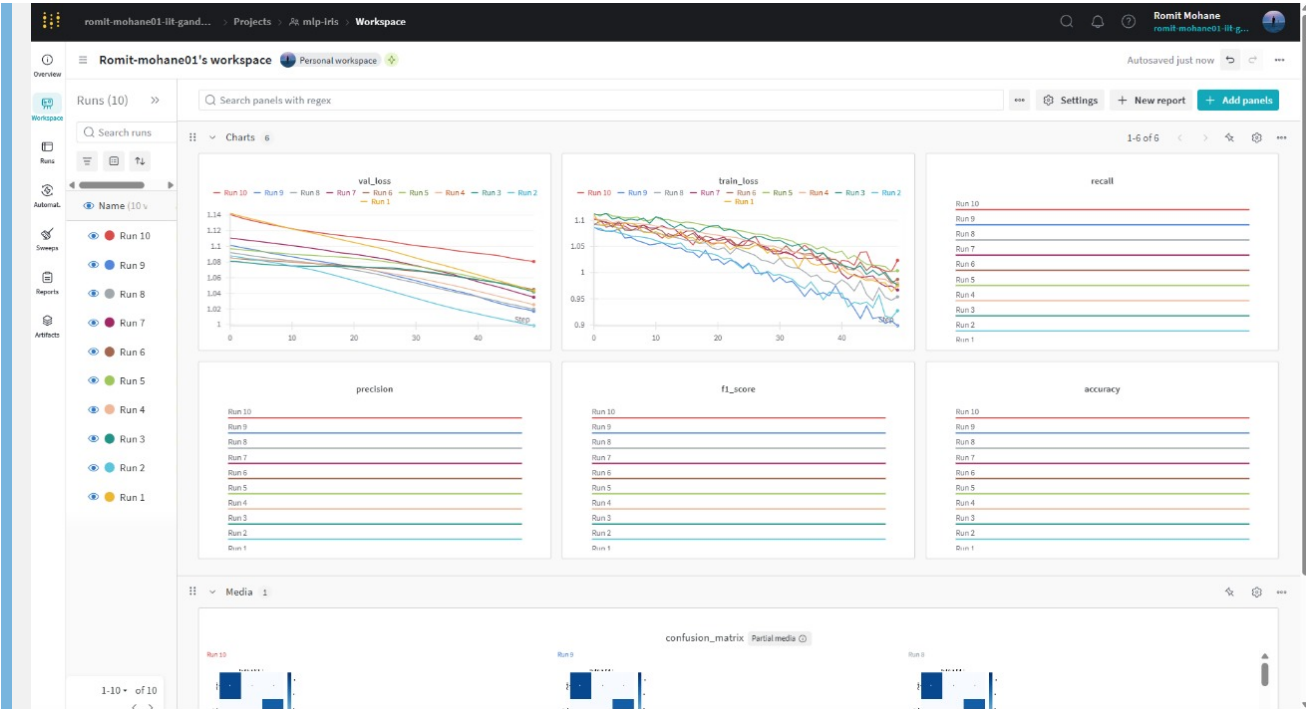
Columns

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	Name (10)	architecture.layers	batch	epoch	hidden	lr	arch	acc	f1_s	prec	reca	Cres	Runtime	End Ttr	ID	Update	train_loss
Run 10	[{"name": "input_layer"}, {"name": "hidden_layer", "neurons": 16, "ac	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	4m ago	3s	Feb 25 '25	kjqlhw23	Feb 25 '25	1.02337	
Run 9	[{"name": "input_layer", "neurons": 4}, {"activation": "ReLU", "name": "hidden_lay	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	4m ago	2s	Feb 25 '25	6vdqd14i	Feb 25 '25	0.89847	
Run 8	[{"name": "input_layer", "neurons": 4}, {"neurons": 16, "activation": "ReLU", "name"	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	4m ago	2s	Feb 25 '25	avrox0fy	Feb 25 '25	0.95376	
Run 7	[{"name": "input_layer", "neurons": 4}, {"name": "hidden_layer", "neurons": 16, "ac	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	4m ago	2s	Feb 25 '25	sga8wdcx	Feb 25 '25	0.96689	
Run 6	[{"neurons": 4, "name": "input_layer"}, {"activation": "ReLU", "name": "hidden_lay	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	5m ago	3s	Feb 25 '25	zjcvknkp	Feb 25 '25	0.98714	
Run 5	[{"name": "input_layer", "neurons": 4}, {"name": "hidden_layer", "neurons": 16, "ac	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	5m ago	3s	Feb 25 '25	ok9ua3ia	Feb 25 '25	1.00359	
Run 4	[{"name": "input_layer", "neurons": 4}, {"name": "hidden_layer", "neurons": 16, "ac	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	6m ago	3s	Feb 25 '25	h7mwat33	Feb 25 '25	0.98012	
Run 3	[{"name": "input_layer", "neurons": 4}, {"name": "hidden_layer", "neurons": 16, "ac	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	6m ago	3s	Feb 25 '25	qq68pkui	Feb 25 '25	0.97579	
Run 2	[{"name": "input_layer", "neurons": 4}, {"activation": "ReLU", "name": "hidden_lay	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	6m ago	3s	Feb 25 '25	7qoc9kyC	Feb 25 '25	0.92721	
Run 1	[{"neurons": 4, "name": "input_layer"}, {"name": "hidden_layer", "neurons": 16, "ac	32	50	16	0.001	3	0.7	0.5935	0.535	0.7	7m ago	3s	Feb 25 '25	voImilhp	Feb 25 '25	0.97497	

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Final Evalution results



Confusion matrix visualisation

