

MLOps Level 2 Pipeline

SyntaxSquad ML Pipeline #5
main_branch

EXECUTION CONFIGURATION ARTIFACTS INFO CONSOLE SCALARS PLOTS DEBUG SAMPLES

Hostname: fv-az818-428

Download full log Filter By Regex

2025-05-20 20:43:58 Completed Task id=0bd2f6d70b474fb9adb3d7edb0b22ce2
Launching the next 1 steps
Launching step [step7_model_evaluation]
Cloning Task id=1ca787a4460b04248af65c9ec529663c3 with parameters: {'General/data_transformation_task_id': 'c621262ce15e41a4bf5b0b8d76d5bb99', 'General/hyperparameter_tuning_task_id': 'aa134c02...'}
Launching step: step7_model_evaluation
Parameters:
{'General/data_transformation_task_id': '\${step3_data_transformation.id}', 'General/hyperparameter_tuning_task_id': '\${step6_hyperparameter_tuning.id}'}

RUNS LIST SORTED BY

- SyntaxSquad ML Pipeline #5 • v 1.0.7 ✓ Completed
main_branch
Updated 3 days ago • Created by HOANG QUAN DANG
- SyntaxSquad ML Pipeline #5 • v 1.0.6 ✓ Completed
WLASL100 ➔ production
Updated 4 days ago • Created by Hengky Edyson
- SyntaxSquad ML Pipeline #2 • v 1.0.1 ✓ Completed
S ➔ Trigger 1: Retrain on ne... WLA... pipe: 6c7f726c44a2434e...
Updated a month ago • Created by HOANG QUAN DANG
- SyntaxSquad ML Pipeline #4 • v 1.0.2 ✓ Completed
Sprint2 ➔ WLASL300 pipe: 4d7cd7aff2404e95aaded63bd67d6bbb
Updated a month ago • Created by HOANG QUAN DANG
- SyntaxSquad ML Pipeline #2 • v 1.0.1 ✓ Completed
Sprint2 ➔ WLASL100 pipe: 6c7f726c44a2434eb273913307df870f
Updated a month ago • Created by HOANG QUAN DANG

DETAILS

RUN INFO

ID: aa134c02...

PARAMETERS

augmentation_f...	1
batch_size	128
chosen_labels	
chosen_landma...	
conv1d_dropout	0.2
epochs	100
gpu_queue	Remote_A100
last_dropout	0.2
learning_rate	0.001
max_frames	195
max_labels	100
max_samples	
pad_value	-100
reduce_lr_factor	0.7

Full details →

SyntaxSquad ML Pipeline #5
main_branch

EXECUTION CONFIGURATION ARTIFACTS INFO CONSOLE SCALARS PLOTS DEBUG SAMPLES

Execution Flow

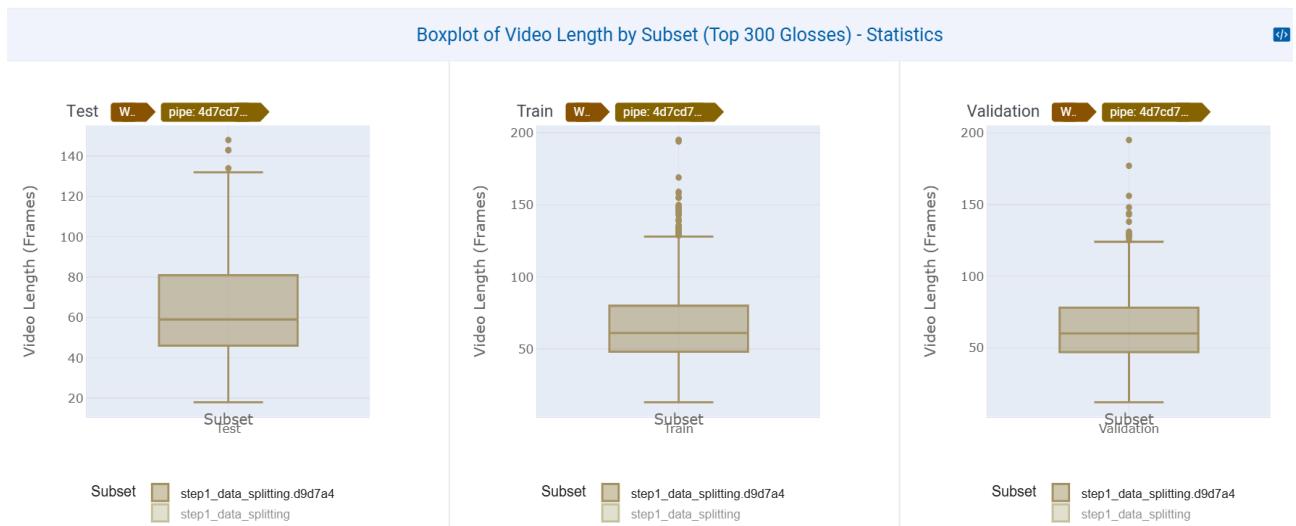
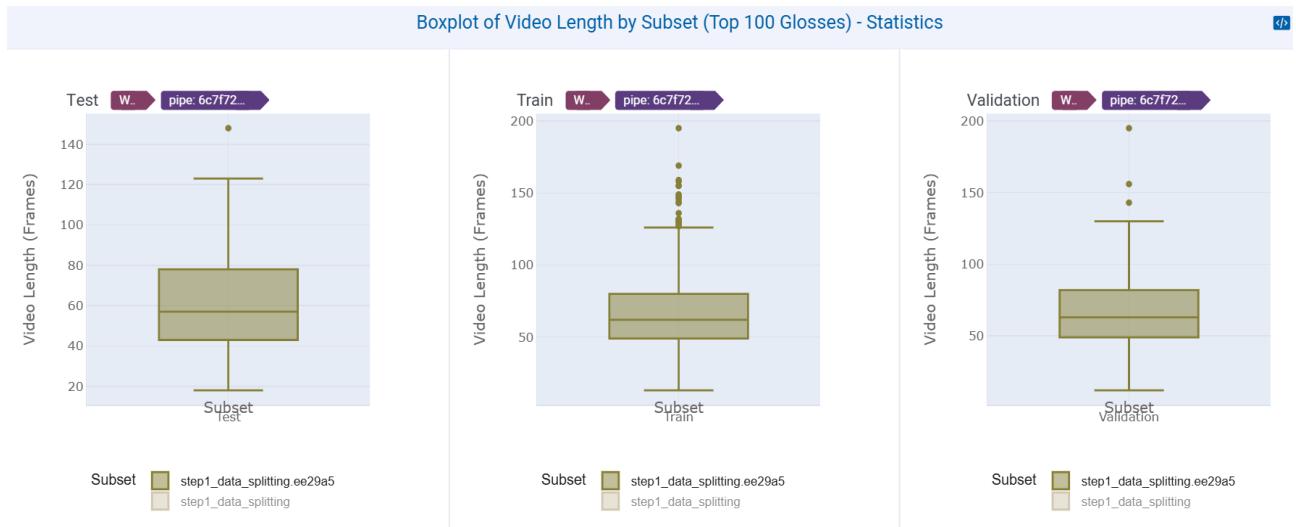
Pipeline Details

Execution Details

Pipeline Step	Task ID	Task Name	Status	Parameters
step1_data_splitting [base task]	2656f512d23c43e9b560774bc5228084	step1_data_splitting	completed	'General/wlasl_landmarks_dataset_id': '\${pipeline.wlasl_landmarks_dataset_id}', 'General/chosen_landmarks': '\${pipeline.chosen_landmarks}', 'General/chosen_labels': '\${pipeline.chosen_labels}', 'General/max_labels': '\${pipeline.max_labels}', 'General/max_landmarks': '\${pipeline.max_landmarks}', 'General/max_labels': '\${pipeline.max_labels}', 'General/max_landmarks': '\${pipeline.max_landmarks}'
step2_data_augmentation [base task]	c766b14fd0475384c303bc9ba74c5c	step2_data_augmentation	completed	'General/data_transformation_task_id': '\${step1_data_splitting.id}', 'General/augmentation_frequency': '\${pipeline.augmentation_frequency}', 'General/data_transformation_task_id': '\${step1_data_splitting.id}'
step3_data_transformation [base	r6317a7ra1k4d1ad4fkhnhh76d4khoo	step3_data_transformation	completed	'General/data_transformation_task_id': '\${step1_data_splitting.id}', 'General/augmentation_frequency': '\${pipeline.augmentation_frequency}', 'General/data_transformation_task_id': '\${step1_data_splitting.id}'

Pipeline Step	Task ID	Task Name	Status	Parameters
				'\${pipeline.last_dropout}', 'General/weights_name': '\${pipeline.weights_name}', 'General/reduce_lr_patience': '\${pipeline.reduce_lr_patience}'.
step4_ConvNeXTiny_model_training [base task]	02a0719081bc4361880cafb576748d88	step4_ConvNeXTiny_model_training	completed	'General/data_transformation_task_id': '\${step3_data_transformation.id}', 'General/model_name': 'ConvNeXTiny', 'General/max_frames': '\${pipeline.max_frames}', 'General/pad_value': '\${pipeline.pad_value}', 'General/batch_size': '\${pipeline.batch_size}', 'General/epochs': '\${pipeline.epochs}', 'General/learning_rate': '\${pipeline.learning_rate}', 'General/convid_dropout': '\${pipeline.convid_dropout}', 'General/last_dropout': '\${pipeline.last_dropout}', 'General/weights_name': '\${pipeline.weights_name}', 'General/reduce_lr_patience': '\${pipeline.reduce_lr_patience}', 'General/total_max_jobs': '\${pipeline.total_max_jobs}'
step5_model_selection [base task]	316b523eed24f5db729c0ac75250784	step5_model_selection	completed	'General/model_training_task_ids': '[\$(step4_GISLR_model_training.id)', '\$(step4_ConvNeXTiny_model_training.id)'
step6_hyperparameter_tuning [base task]	0bd2f6d70b474fb9adb3d7edb0b22ce2	step6_hyperparameter_tuning	completed	'General/model_selection_task_id': '\${step5_model_selection.id}', 'General/execution_queue': '\${pipeline.gpu_queue}', 'General/max_iteration_per_job': '\${pipeline.epochs}', 'General/total_max_jobs': '\${pipeline.total_max_jobs}'
step7_model_evaluation [base task]	6f946ec972f54151b8392088253108de	step7_model_evaluation	completed	'General/data_transformation_task_id': '\${step3_data_transformation.id}', 'General/hyperparameter_tuning_task_id': '\${step6_hyperparameter_tuning.id}'

Step 1 - Data Splitting (for both WLALS100 and WLALS300)



Dataset Statistics for Top 100 Glosses - Statistics

qb

step1_data_splitting.ee29a5 WLAS... pipe: 6c7f726c44a2434eb2739...

Subset	Number of Videos	Number of Classes	Average Frames/Video	Number of Landmarks/Frame	Video Length (mean)	Video Length (std)	Video Length (min)	Video Length (max)
Train	1442	100	65.3710124827	180	65.3710124827	24.0987228782	13	195
Validation	338	100	66.7603550296	180	66.7603550296	25.3954824809	12	195
Test	258	100	62.4612403101	180	62.4612403101	24.1867018487	18	148

Dataset Statistics for Top 300 Glosses - Statistics

qb

step1_data_splitting.d9d7a4 WLAS... pipe: 4d7cd7aff2404e95aaed6...

Subset	Number of Videos	Number of Classes	Average Frames/Video	Number of Landmarks/Frame	Video Length (mean)	Video Length (std)	Video Length (min)	Video Length (max)
Train	3549	300	65.0904480135	180	65.0904480135	24.374427789	13	195
Validation	900	300	63.8688888889	180	63.8688888889	24.2747191511	12	195
Test	668	300	63.9820359281	180	63.9820359281	24.2825010392	18	148

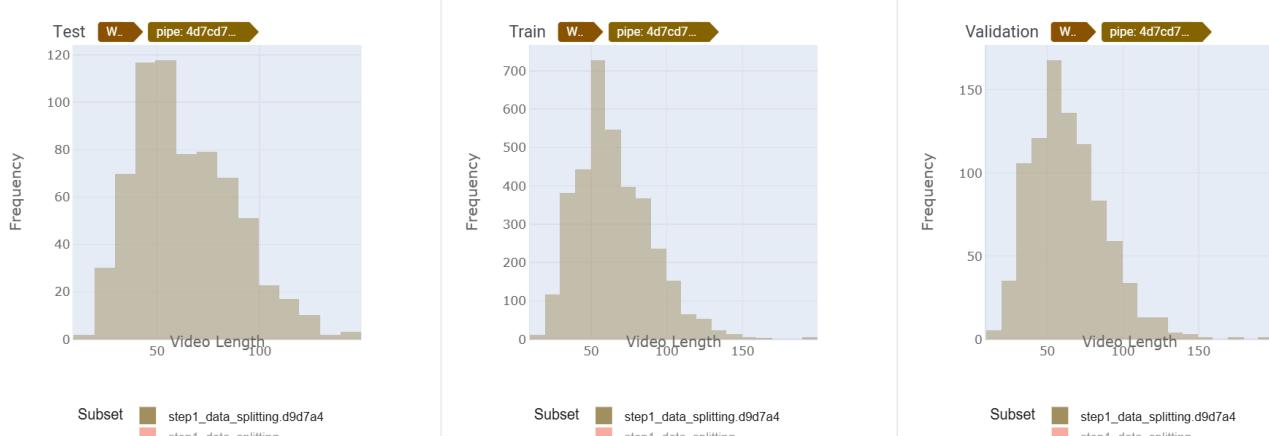
Histogram of Video Length by Subset (Top 100 Glosses) - Statistics

qb

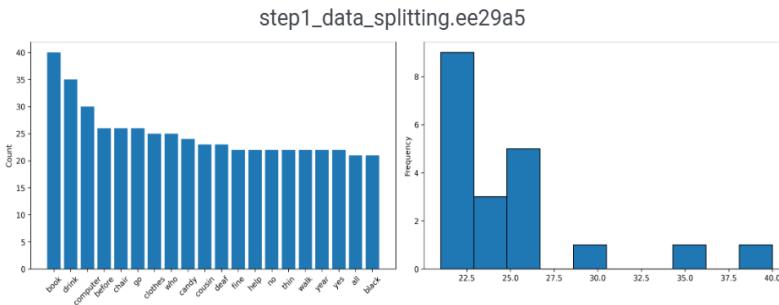


Histogram of Video Length by Subset (Top 300 Glosses) - Statistics

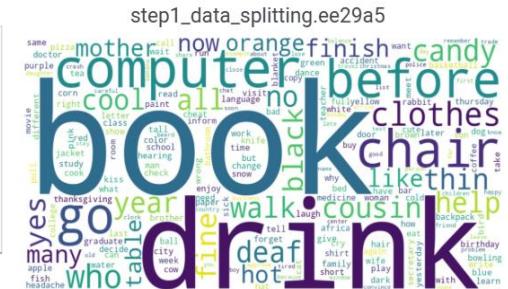
qb



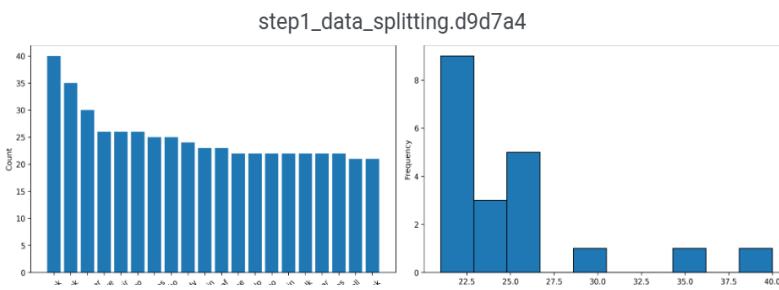
Distribution of Top 20/100 Glosses - Statistics



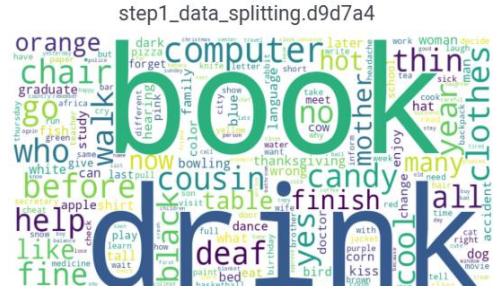
Word Cloud of Top 20/100 Glosses - Statistics



Distribution of Top 20/300 Glosses - Statistics



Word Cloud of Top 20/300 Glosses - Statistics

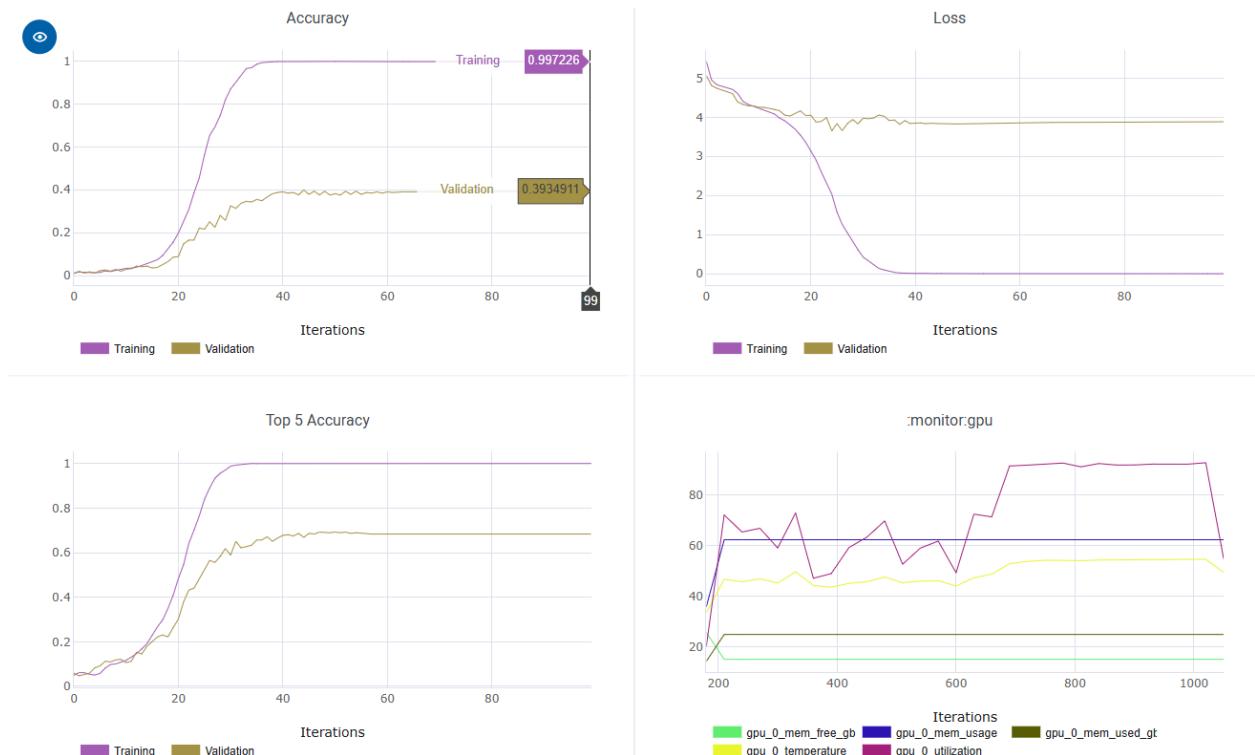


Step 2 and 3 - Data Augmentation and Transformation

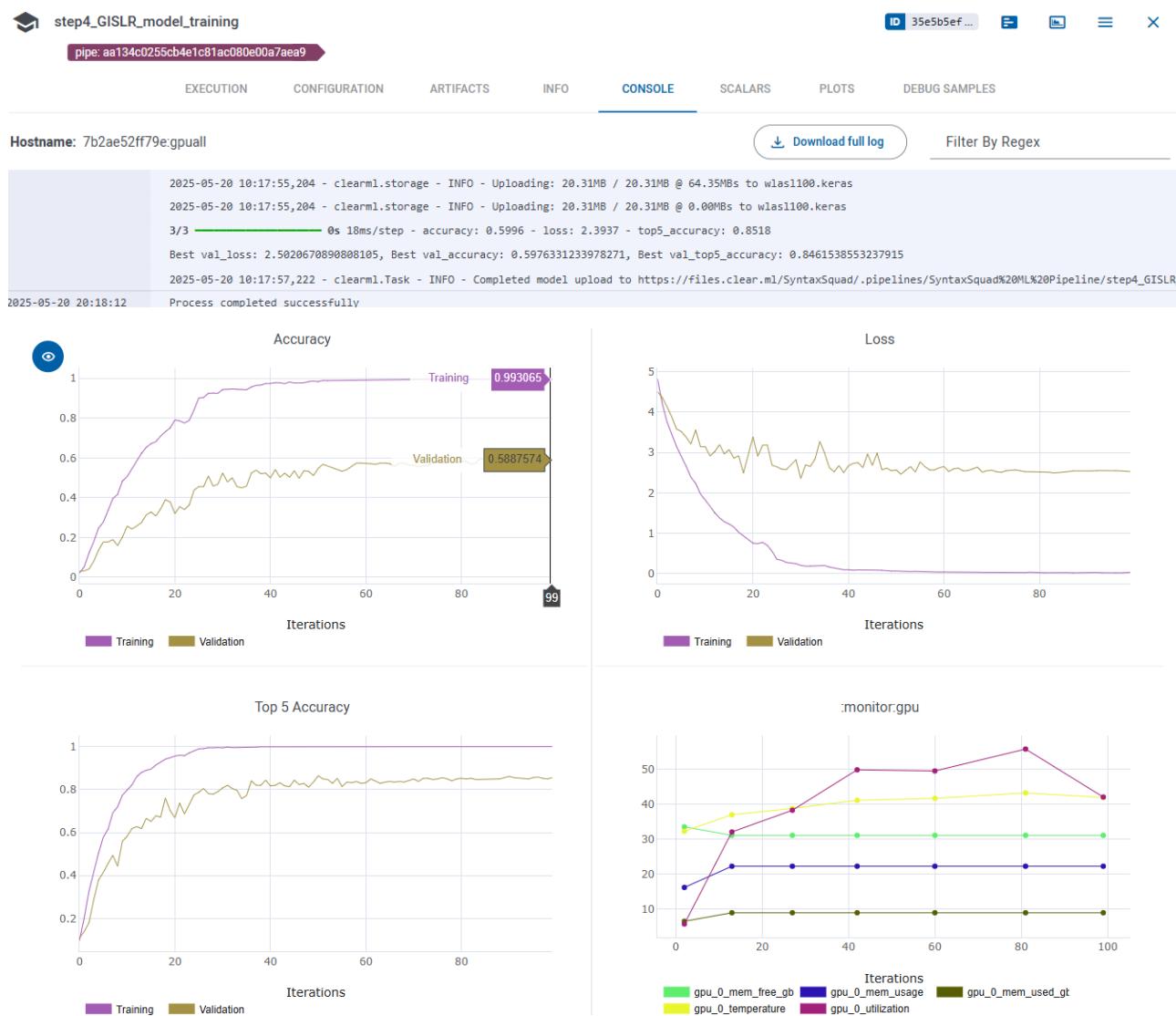
step2_data_augmentation		step3_data_transformation	
Sprint2	pipe: aa134c0255cb4e1c81ac080e00a7aea9	Sprint2	pipe: aa134c0255cb4e1c81ac080e00a7aea9
EXECUTION	CONFIGURATION	EXECUTION	CONFIGURATION
me: 6c47cc48f51a:gpuall		me: 6c47cc48f51a:gpuall	
Environment setup completed successfully		100% 92.98/92.98 MB [00:01<00:00, 87.23MB/s]	
Starting Task Execution:		2025-05-20 10:07:31,417 - clearml.storage - INFO - Downloaded 92.98 MB successfully from https://files.clear.ml/projects/ab65c2cd478a411da52d403d389357de/experiments/cf	
-20 20:04:58 2025-05-20 10:04:53,282 - clearml.storage - INFO - Downloading: 388.42MB from https://files.clear.m	19% 75.00/388.42 MB [00:00<00:04, 72.58MB/s]; ClearML Monitor: Gl	2025-05-20 10:07:32,744 - clearml.storage - INFO - Downloading: 66.40MB from https://files.clear.m	
	81% 315.00/388.42 MB [00:04<00:06, 71.28MB/s];	2025-05-20 10:07:33,412 - clearml.storage - INFO - Downloaded 66.40 MB successfully from https://f	
-20 20:05:03 2025-05-20 10:05:01,398 - clearml.storage - INFO - Downloaded 388.42 MB successfully from https://f	100% 388.42/388.42 MB [00:08<00:08, 47.92MB/s];	100% 2884/2884 [00:02<00:00, 1211.12it/s]	
	2% 35/1442 [00:00<00:11, 120.78it/s]	100% 338/338 [00:00<00:00, 5221.31it/s]	
-20 20:05:09 43% 617/1442 [00:05<00:07, 116.90it/s]		100% 258/258 [00:00<00:00, 5144.01it/s]	
-20 20:05:14 77% 1115/1442 [00:11<00:02, 109.07it/s]		(2884, 195, 180, 3) (338, 195, 180, 3) (258, 195, 180, 3)	
-20 20:05:20 100% 1442/1442 [00:14<00:00, 101.27it/s]	The Training set has 2884 videos	X_train: (2884, 195, 180, 3) - X_val: (338, 195, 180, 3) - X_test: (258, 195, 180, 3)	
	First video has 72 frames	y_train: (2884,) - y_val: (338,) - y_test: (258,)	
	Each frame has 180 landmarks		
	Each landmark has 3 coordinates		
-20 20:05:31 2025-05-20 10:05:28,153 - clearml.storage - INFO - Uploading: 679.29MB to /tmp/X_train.dydp4_p_pk1		2025-05-20 10:09:01,325 - clearml.storage - INFO - Uploading: 307.17MB to /tmp/X_train.ysxmny1.y	
	24% 160.00/679.29 MB [00:03<00:10, 49.37MB/s];	63% 195.00/307.17 MB [00:03<00:02, 49.58MB/s];	
-20 20:05:36 65% 440.00/679.29 MB [00:08<00:04, 51.83MB/s];		100% 307.17/307.17 MB [00:09<00:00, 33.60MB/s];	
-20 20:05:42 100% 679.29/679.29 MB [00:13<00:00, 50.81MB/s];		2025-05-20 10:09:21,206 - clearml.storage - INFO - Uploading: 43.27MB to /tmp/X_val.hevxpkpe.npz	
-20 20:05:47 100% 679.29/679.29 MB [00:19<00:00, 34.64MB/s];		92% 40.00/43.27 MB [00:00<00:00, 53.59MB/s]; /root/.clearml/	
-20 20:05:59 Process completed successfully		full_bar = Bar(Frac,	
		100% 43.27/43.27 MB [00:01<00:00, 40.73MB/s];	
		2025-05-20 10:09:32,824 - clearml.storage - INFO - Uploading: 31.09MB to /tmp/X_test.5ps09b05.npz	
		96% 30.00/31.09 MB [00:00<00:00, 56.39MB/s];	
		100% 31.09/31.09 MB [00:03<00:00, 8.92MB/s];	
		Process completed successfully	

Step 4 – Multi-model Training (ConvNeXtTiny model)

step4_ConvNeXtTiny_model_training	
Sprint2	pipe: aa134c0255cb4e1c81ac080e00a7aea9
EXECUTION	CONFIGURATION
Hostname: 3dde0a263a3c:gpuall	
	Download full log Filter By Regex
2025-05-20 10:30:02,195 - clearml.storage - INFO - Uploading: 319.87MB / 319.87MB @ 27.13MBs to wlas1100.keras	
2025-05-20 10:30:02,195 - clearml.storage - INFO - Uploading: 319.87MB / 319.87MB @ 0.00MBs to wlas1100.keras	
2025-05-20 10:30:04,796 - clearml.Task - INFO - Completed model upload to https://files.clear.ml/SyntaxSquad/.pipelines/SyntaxSquad%20ML%20Pipeline/step4_ConvNe	
2025-05-20 20:30:13 3/3 0s 42ms/step - accuracy: 0.4126 - loss: 3.7024 - top5_accuracy: 0.6751	
Best val_loss: 3.8401975631713867, Best val_accuracy: 0.3994082808494568, Best val_top5_accuracy: 0.668639063835144	
2025-05-20 20:30:29 Process completed successfully	



Step 4 – Multi-model Training (best solution from GISLR competition)



Step 5 – Model Selection (based on top-1 accuracy)

step5_model_selection

ID: 316b523e...

pipe: aa134c0255cb4e1c81ac080e00a7aea9

EXECUTION CONFIGURATION ARTIFACTS INFO CONSOLE SCALARS PLOTS DEBUG SAMPLES

Hostname: 6c47cc48f51a:gpuall

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2025-05-20 20:31:41	ClearML results page: https://app.clear.ml/projects/ab65c2cd478a411da62d403d389357de/experiments/316b523eeded24f5db729c0ac75250784/output/log Best Model Training Task ID: 35e5b5ef355b43b6ae4247920a08c4a4 Best Model Name: GISLR Validation Loss: 2.5020670890808105 Validation Top-5 Accuracy: 0.8461538553237915 Validation Accuracy: 0.5976331233978271 ClearML Monitor: GPU monitoring failed getting GPU reading, switching off GPU monitoring
2025-05-20 20:31:52	Process completed successfully

Step 6 – Hyperparameter Tuning (Multi-objective optimization)

step6_hyperparameter_tuning

ID: 0bd2f6d7...

optimization pipe: aa134c0255cb4e1c81ac080e00a7aea9

EXECUTION CONFIGURATION ARTIFACTS INFO CONSOLE SCALARS PLOTS DEBUG SAMPLES

Hostname: 6c47cc48f51a:gpuall

[Download full log](#) Filter By Regex

2025-05-20 20:33:15	2025-05-20 10:33:11,676 - clearml.automation.optimization - INFO - Creating new Task: {'General/batch_size': 256, 'General/learning_rate': 0.0006000000000000001, 'General/conv1d_dropout': 0.4, 'General/fast_dropout': 0.5, 'General/reduce_lr_patience': 3, 'General/reduce_lr_rate': 660u, 'General/reduce_lr_step': 2, 'General/val_accuracy': 0.6035503149032593} at iteration [99, 99]
2025-05-20 20:33:26	Progress report #1 completed, sleeping for 5.0 minutes
2025-05-20 20:38:28	Progress report #2 completed, sleeping for 5.0 minutes
2025-05-20 20:40:22	OptunaObjective result metric=[2.0324881076812744, 0.5177514553070068], iteration [(99, 2.0324881076812744), (99, 0.5177514553070068)] [I 2025-05-20 10:40:19,786] Trial 1 finished with values: [2.0324881076812744, 0.5177514553070068] and parameters: {'General/batch_size': 256, 'General/learning_rate': 0.0006000000000000001, 'General/conv1d_dropout': 0.4, 'General/fast_dropout': 0.5, 'General/reduce_lr_patience': 3, 'General/reduce_lr_rate': 660u, 'General/reduce_lr_step': 2, 'General/val_accuracy': 0.6035503149032593}
2025-05-20 20:42:10	OptunaObjective result metric=[2.2650980949401855, 0.6035503149032593], iteration [(99, 2.2650980949401855), (99, 0.6035503149032593)] [I 2025-05-20 10:42:09,190] Trial 0 finished with values: [2.2650980949401855, 0.6035503149032593] and parameters: {'General/batch_size': 256, 'General/learning_rate': 0.0006000000000000001, 'General/conv1d_dropout': 0.4, 'General/fast_dropout': 0.5, 'General/reduce_lr_patience': 3, 'General/reduce_lr_rate': 660u, 'General/reduce_lr_step': 2, 'General/val_accuracy': 0.6035503149032593}
2025-05-20 20:42:15	Best Job: 908db57f0b584a7ca9d6fb8c2f18252c Best HPO Parameters: {'TF_DEFINE/lostostderr': 'False', 'TF_DEFINE/alsologtostderr': 'False', 'TF_DEFINE/log_dir': '', 'TF_DEFINE/v': '-1', 'TF_DEFINE/verbosity': '0', 'val_loss': 'last'} Best Metrics: {'val_loss': 'last': 2.2650980949401855, 'min': 2.2650980949401855, 'max': 2.2650980949401855}, 'val_top5_accuracy': {'last': 0.8727810382843018, 'min': 0.8727810382843018, 'max': 0.8727810382843018}
2025-05-20 20:43:30	Job 908db57f0b584a7ca9d6fb8c2f18252c completed with objective value [2.2650980949401855, 0.6035503149032593] at iteration [99, 99] New top performer! This job broke the record. Parameters: {'status': 'completed', 'General/batch_size': 256, 'General/learning_rate': 0.0006000000000000001, 'General/reduce_lr_patience': 3, 'General/conv1d_dropout': 0.4, 'General/fast_dropout': 0.5, 'General/reduce_lr_rate': 660u, 'General/reduce_lr_step': 2, 'General/val_accuracy': 0.6035503149032593} Job f7a884b3022d4f74ba3c62fdb8e94b2d completed with objective value [2.0324881076812744, 0.5177514553070068] at iteration [99, 99] Parameters: {'status': 'completed', 'General/batch_size': 256, 'General/learning_rate': 0.0006000000000000001, 'General/reduce_lr_patience': 2, 'General/conv1d_dropout': 0.4, 'General/fast_dropout': 0.5, 'General/reduce_lr_rate': 640u, 'General/reduce_lr_step': 2, 'General/val_accuracy': 0.6035503149032593} Updating job performance summary plot/table
2025-05-20 20:43:36	Archiving Task id=f7a884b3022d4f74ba3c62fdb8e94b2d (#1 objective=[2.0324881076812744, 0.5177514553070068]) Updating job performance summary plot/table
2025-05-20 20:43:47	Process completed successfully

step6_hyperparameter_tuning

optimization pipe: aa134c0255cb4e1c81ac080e00a7aea9

SORTED BY: COMPLETED

EXECUTION CONFIGURATION ARTIFACTS INFO CONSOLE SCALARS PLOTS DEBUG SAMPLES

Parallel Coordinates

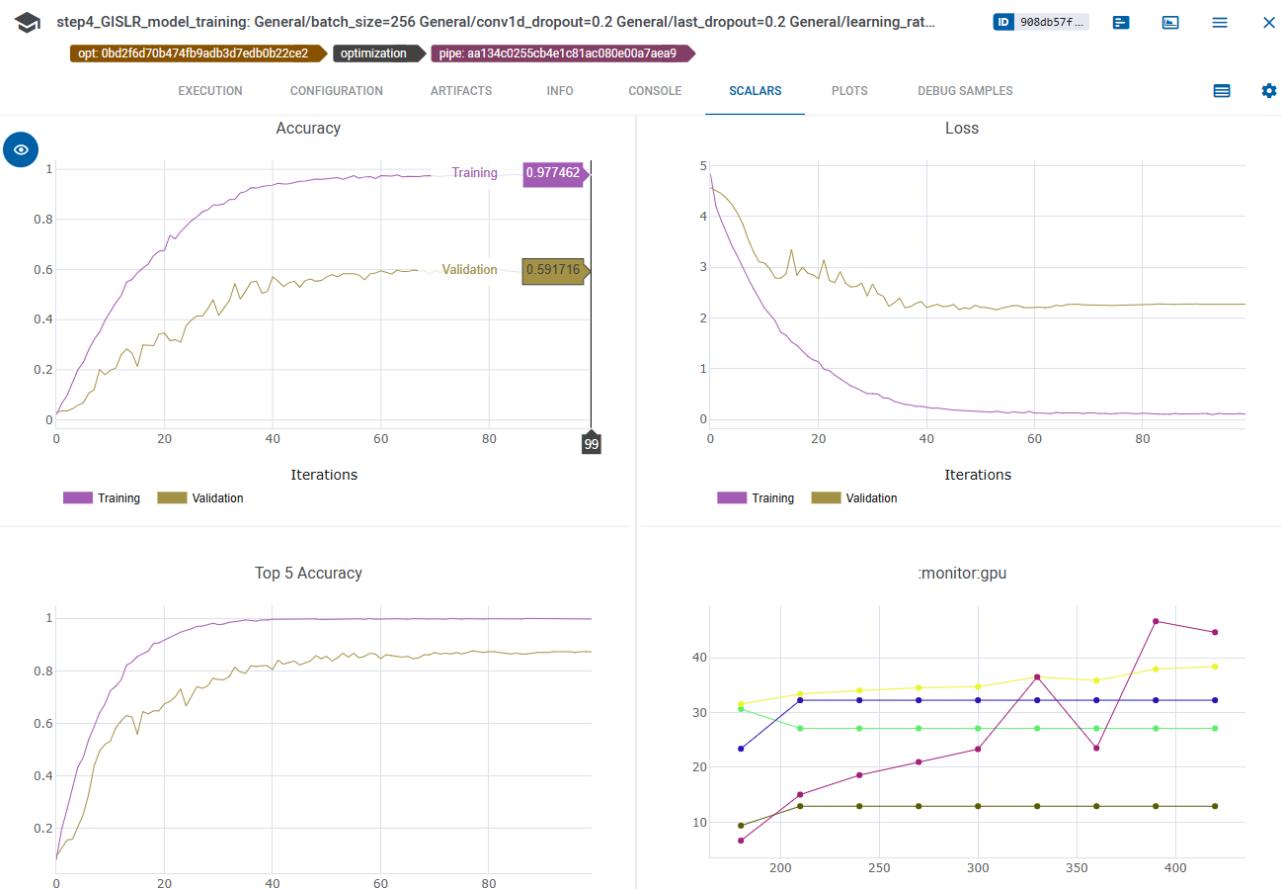
task_id iteration General/batch_size General/conv1d_dropout General/fast_dropout General/learning_rate General/reduce_lr_patience Best Metrics/val_loss Best Metrics/val_accuracy

f7a884...	106.5	281.6	0.4	0.5	660u	3	2.25	0.6
908db5...	89.1	230.4	0.35	0.35	640u	3	2.2	0.58
	105	270	0.3	0.3	620u	3	2.15	0.56
	200	250	0.25	0.25	600u	3	2.1	0.54
	260	240	0.2	0.2	580u	3	2.05	0.52
	280	220	0.2	0.2	560u	3	2.01	0.51

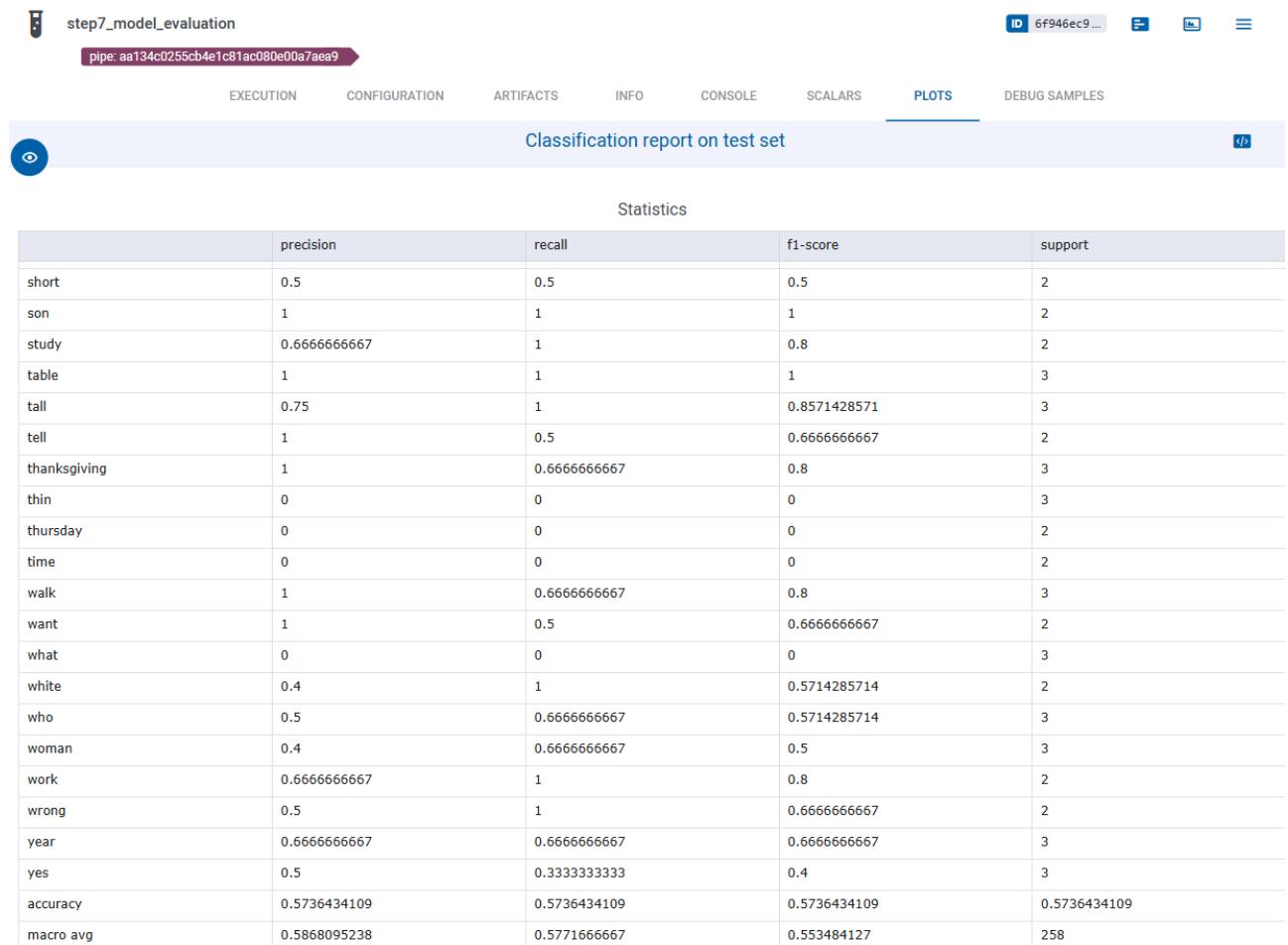
summary

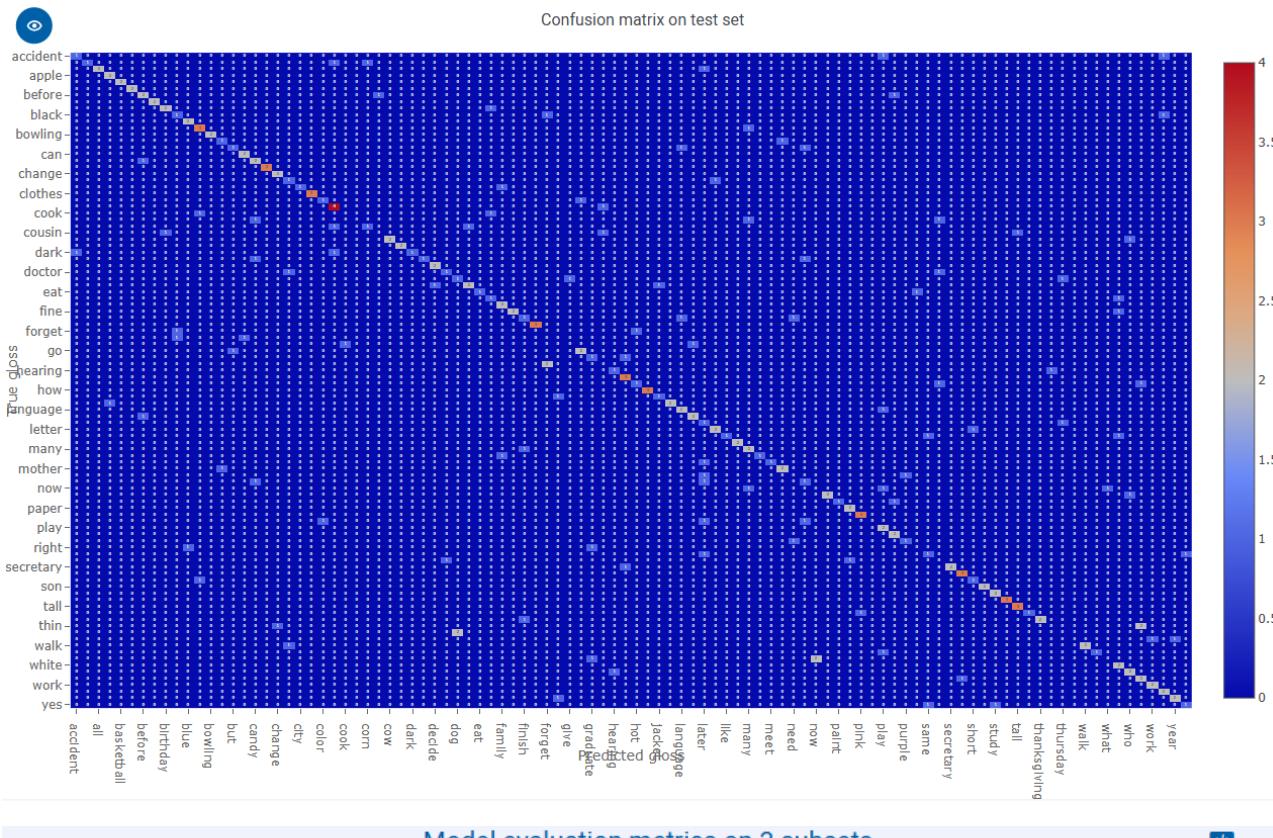
objective: Best Metrics/val_loss, Best Metrics/val_accuracy

task_id	Best Metrics/val_loss	Best Metrics/val_accuracy	Iteration	General/batch_size	General/conv1d_dn	General/fast_dropout	General/learning_r_	General/reduce_lr_	status
908db57f0b584a7c	2.26509809494018	0.6035503149032593	99	256	0.2	0.2	0.0006000000000000001	3	completed
f7a884b3022d4f74	2.0324881076812744	0.5177514553070068	99	256	0.4	0.5	0.0006000000000000001	2	completed



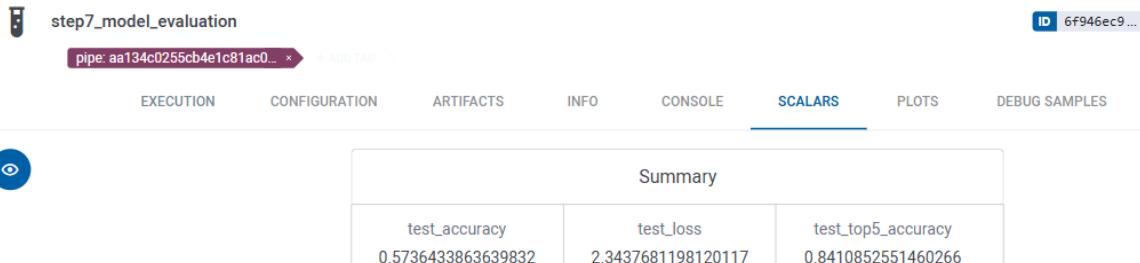
Step 7 – Model Evaluation



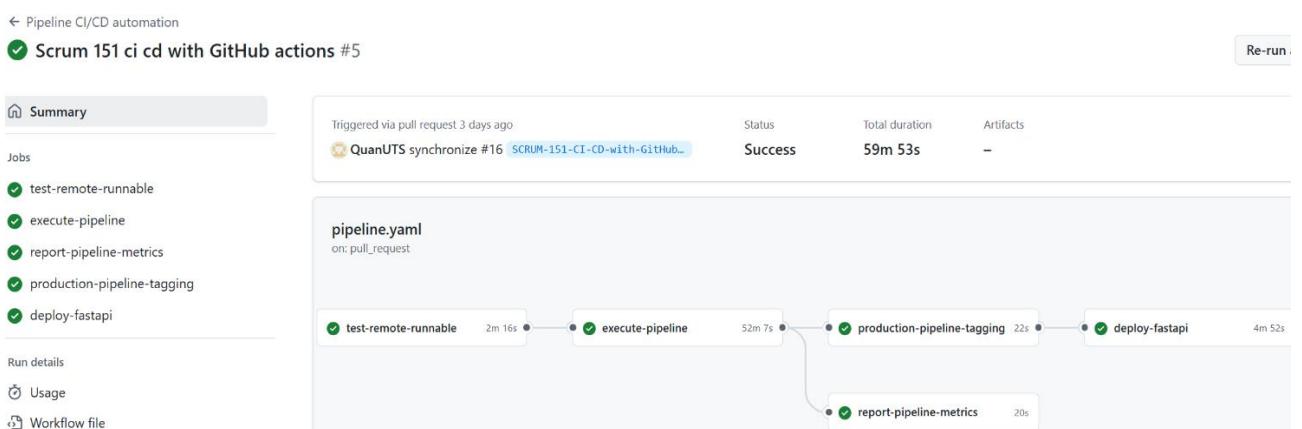


Model evaluation metrics on 3 subsets

Subset	Loss	Accuracy	Top-5 Accuracy
Train	0.0096978797	0.9986130595	1
Validation	2.2650980949	0.6035503149	0.8727810383
Test	2.3437681198	0.5736433864	0.8410852551



CI/CD Pipeline with GitHub Actions



Job 1. test-remote-runnable

test-remote-runnable
succeeded 3 days ago in 2m 16s

Step 5 - Poll for task progress 59s

```
1 ▶ Run python cicd/check_remotely_runnable.py "2db1133e48e64d1c9939b4fa75519058"
2 python cicd/check_remotely_runnable.py "2db1133e48e64d1c9939b4fa75519058"
3 echo "🟡 This job's status is success."
4 shell: /usr/bin/bash -e {0}
5 env:
6   CLEARML_API_HOST: ***
7   CLEARML_API_ACCESS_KEY: ***
8   CLEARML_API_SECRET_KEY: ***
9   QUEUE: Remote_CPU
10  pythonlocation: /opt/hostedtoolcache/Python/3.11.12/x64
11  PKG_CONFIG_PATH: /opt/hostedtoolcache/Python/3.11.12/x64/lib/pkgconfig
12  Python_ROOT_DIR: /opt/hostedtoolcache/Python/3.11.12/x64
13  Python2_ROOT_DIR: /opt/hostedtoolcache/Python/3.11.12/x64
14  Python3_ROOT_DIR: /opt/hostedtoolcache/Python/3.11.12/x64
15  LD_LIBRARY_PATH: /opt/hostedtoolcache/Python/3.11.12/x64/lib
16 queued
17 in_progress
18 in_progress
19 in_progress
20 in_progress
21 in_progress
22 in_progress
23 in_progress
24 in_progress
25 in_progress
26 in_progress
27 in_progress
28 🟢 This job's status is success.
```

Job 2. execute-pipeline

execute-pipeline
succeeded 3 days ago in 52m 7s

Set up job 0s

Step 0 - Check the event type 0s

Step 1 - Checkout the repository 2s

Step 2 - Set up Python 0s

Step 3 - Install ClearML 10s

Step 4 - Run the pipeline 51m 52s

Run python pipeline_from_tasks.py

```
1 ClearML Task: created new task id=aa134c0255cb4e1c81ac080e00a7aea9
2 ClearML results page: https://app.clear.ml/projects/ab65c2cd478a411da62d403d389357de/experiments/aa134c0255cb4e1c81ac080e00a7aea9/output/log
3 ClearML pipeline page: https://app.clear.ml/pipelines/ab65c2cd478a411da62d403d389357de/experiments/aa134c0255cb4e1c81ac080e00a7aea9
4 2025-05-20 09:54:11,597 - clearml.util - WARNING - 2 task found when searching for `{'project_name': 'SyntaxSquad', 'task_name': 'Step 4: Prepare TF dataset with noise normalization and train the model', 'include_archived': True, 'task_filter': {'status': ['created', 'queued', 'in_progress', 'published', 'stopped', 'completed', 'closed']}}
5 2025-05-20 09:54:11,598 - clearml.util - WARNING - Selected task `Step 4: Prepare TF dataset with noise normalization and train the model` (id=e14eedad9a02740789dd8be36691e8974)
6 2025-05-20 09:54:11,748 - clearml.util - WARNING - 2 task found when searching for `{'project_name': 'SyntaxSquad', 'task_name': 'Step 4: Prepare TF dataset with noise normalization and train the model', 'include_archived': True, 'task_filter': {'status': ['created', 'queued', 'in_progress', 'published', 'stopped', 'completed', 'closed']}}
7 2025-05-20 09:54:11,748 - clearml.util - WARNING - Selected task `Step 4: Prepare TF dataset with noise normalization and train the model` (id=e14eedad9a02740789dd8be36691e8974)
8 22 Launching the next 1 steps
9 23 Launching step [step1_data_splitting]
10 Completed Task id=6f946ec972f54151b8392088253108de
11 Launching the next 0 steps
12 🟢 This job's status is success.
```

Post Step 2 - Set up Python 0s

Post Step 1 - Checkout the repository 0s

Complete job 0s

Job 3. report-pipeline-metrics

report-pipeline-metrics
succeeded 3 days ago in 20s

Search logs

> Set up job 1s
> Step 0 - Check the event type 0s
> Step 1 - Checkout the repository 2s
> Step 2 - Set up Python 0s
> Step 3 - Install dependencies 0s
v > Step 4 - Comment metrics from step7_model_evaluation of the pipeline 3s

```
1 ▶ Run python cicd/pipeline_reports.py
17 Running on commit hash: 44b94a28eb960ba1f1418cffc44270aee79a7a41
18 {'action': ' synchronize', 'after': '44b94a28eb960ba1f1418cffc44270aee79a7a41', 'before': 'e3a4c8f694c65e2e36446d93e71c575366fbcb2e', 'number': 16,
  'pull_request': {'_links': {'comments': {'href': 'https://api.github.com/repos/HengkyUTS/SyntaxSquad/issues/16/comments'}, 'commits': {'href':
    'https://api.github.com/repos/HengkyUTS/SyntaxSquad/pulls/16/commits'}, 'html': {'href': 'https://github.com/HengkyUTS/SyntaxSquad/pull/16'}, 'issue':
    {'href': 'https://api.github.com/repos/HengkyUTS/SyntaxSquad/issues/16'}, 'review_comment': {'href':
    'https://api.github.com/repos/HengkyUTS/SyntaxSquad/pulls/comments/{number}'}, 'review_comments': {'href':
    'https://api.github.com/repos/HengkyUTS/SyntaxSquad/pulls/16/comments'}, 'self': {'href': 'https://api.github.com/repos/HengkyUTS/SyntaxSquad/pulls/16'},
  'statuses': {'href': 'https://api.github.com/repos/HengkyUTS/SyntaxSquad/statuses/44b94a28eb960ba1f1418cffc44270aee79a7a41'}, 'active_lock_reason': None,
  'additions': 83, 'assignee': None, 'assignees': [], 'author_association': 'COLLABORATOR', 'auto_merge': None, 'base': {'label': 'HengkyUTS:main', 'ref':
    'main', 'repo': {'allow_auto_merge': False, 'allow_forking': True, 'allow_merge_commit': True, 'allow_rebase_merge': True, 'allow_squash_merge': True,
    'allow_update_branch': False, 'archive_url': 'https://api.github.com/repos/HengkyUTS/SyntaxSquad/{archive_format}{{ref}}', 'archived': False,
    'assignees_url': 'https://api.github.com/repos/HengkyUTS/SyntaxSquad/assignees{/user}', 'blobs_url':
```

QuanUTS added 3 commits 3 days ago

- Merge branch 'main' into SCRUM-151-CI-CD-with-GitHub-Actions 864e3ba
- Merge branch 'main' into SCRUM-151-CI-CD-with-GitHub-Actions fe791a3
- SCRUM-135 Update FastAPI deployment step to increase wait time for se... 44b94a2

QuanUTS commented 3 days ago

Model evaluation metrics on 3 subsets:

Subset	Loss	Accuracy	Top-5 Accuracy
Train	0.00969788	0.998613	1
Validation	2.2651	0.60355	0.872781
Test	2.34377	0.573643	0.841085

You can view full task results [here](#)

QuanUTS merged commit 9554c8e into main 3 days ago 5 checks passed

View details Revert

Job 4. production-pipeline-tagging

production-pipeline-tagging
succeeded 3 days ago in 22s

Search logs

> Set up job 1s
> Step 0 - Check the event type 0s
> Step 1 - Checkout the repository 1s
> Step 2 - Set up Python 0s
> Step 3 - Install dependencies 0s
v > Step 4 - Assign the latest Pipeline as production if it's better than the current one 2s

```
1 ▶ Run python cicd/production_tagging.py
16 Running on commit hash: 44b94a28eb960ba1f1418cffc44270aee79a7a41
17 Best test_accuracy in the system is: 0.6162790656089783 and current metric is 0.5736433863639832
18 This means current test_accuracy is worse! Not tagging.
19 This job's status is success.
```

Job 5. deploy-fastapi

deploy-fastapi
succeeded 3 days ago in 4m 52s

> ✓ 🚀 Step 0 - Check the event type 0s

> ✓ 🚀 Step 1 - Checkout the repository 2s

> ✓ 🚀 Step 2 - Set up Python 0s

> ✓ 🚀 Step 3 - Install dependencies 41s

✓ ✓ 🚀 Step 4 - Deploy FastAPI model serving 4m 5s

```
1 ► Run fastapi dev serving/pose2gloss.py & # Start the FastAPI server in the background
18
19     FastAPI Starting development server 🚶
20
21         Searching for package file structure from directories with
22             __init__.py files
23 2025-05-20 10:47:16.474909: I external/local_xla/xla/tsl/cuda/cudart_stub.cc:32] Could not find cuda drivers on your machine, GPU will not be used.
24 2025-05-20 10:47:16.478069: I external/local_xla/xla/tsl/cuda/cudart_stub.cc:32] Could not find cuda drivers on your machine, GPU will not be used.
25 2025-05-20 10:47:16.484699: E external/local_xla/xla/stream_executor/cuda/cuda_fft.cc:477] Unable to register cuFFT factory: Attempting to register factory
for plugin cuFFT when one has already been registered
26 WARNING: All log messages before absl::InitializeLog() is called are written to STDERR
27 E0000 00:00:1747738036.499090 1904 cuda_dnn.cc:8310] Unable to register cuDNN factory: Attempting to register factory for plugin cuDNN when one has
already been registered
28 E0000 00:00:1747738036.504085 1904 cuda_blas.cc:1418] Unable to register cuBLAS factory: Attempting to register factory for plugin cuBLAS when one has
already been registered
29 2025-05-20 10:47:16.519525: I tensorflow/core/platform/cpu_feature_guard.cc:210] This TensorFlow binary is optimized to use available CPU instructions in
performance-critical operations.
30 To enable the following instructions: AVX2 FMA, in other operations, rebuild TensorFlow with the appropriate compiler flags.
31         Importing from /home/runner/work/SyntaxSquad
32
33 module └ SyntaxSquad
34   └ __init__.py
35     └ serving
36       └ __init__.py
37       └ pose2gloss.py
38
39 code Importing the FastAPI app object from the module with the following
40 code:
41
42     from SyntaxSquad.serving.pose2gloss import app
43
44 app Using import string: SyntaxSquad.serving.pose2gloss:app
45
46 server Server started at http://127.0.0.1:8000
47 server Documentation at http://127.0.0.1:8000/docs
48
49 tip Running in development mode, for production use: fastapi run
50
51 Logs:
52
53 INFO Will watch for changes in these directories:
54 ['/home/runner/work/SyntaxSquad/SyntaxSquad']
55 INFO Uvicorn running on http://127.0.0.1:8000 (Press CTRL+C to quit)
56 INFO Started reloader process [1904] using Watchfiles
```

108	% Total	% Received	% Xferd	Average Speed	Time	Time	Time	Current	
109				Dload	Upload	Total	Spent	Left	Speed
111	INFO	127.0.0.1:46236	-	"GET /health HTTP/1.1"	200				
112	0	0	0	0	0	0	0	0	
113	100	40	100	40	0	0	20376	0	--:--:-- --:--:-- --:--:-- 40000

✓ ✓ 🚀 Step 5 - Notify deployment status 0s

```
1 ► Run echo "FastAPI model serving deployed successfully on port $FASTAPI_PORT"
15 FastAPI model serving deployed successfully on port 8000
```

✓ ✓ 🚀 Step 6 - Stop FastAPI server (cleanup) 0s

```
1 ► Run kill $(cat fastapi.pid) # Stop the FastAPI server using the saved PID
16 🍏 This job's status is success.
```

> ✓ Post 🚀 Step 2 - Set up Python 0s

> ✓ Post 🚀 Step 1 - Checkout the repository 1s

> ✓ Complete job 0s

Product User Interface (MVP)

RUNNING... Stop Deploy ⋮

 upload video

choose your video (.mp4 / .avi)

 Drag and drop file here
Limit 200MB per file • MP4, AVI, MPEG4

 start Webcam  stop Webcam

 show Landmarks

 Webcam Feed



 Prediction

 Predicted Glosses

pull (1.00)

 Sentence

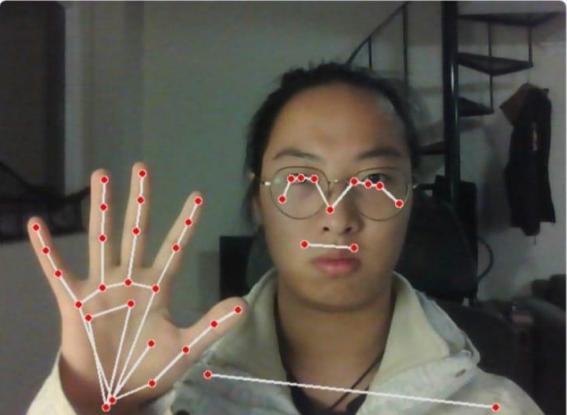
Pull.

RUNNING... Stop Deploy ⋮

 start Webcam 

 show Landmarks

 Webcam Feed



 Prediction

 Predicted Glosses

pull (0.97) → dog (0.95) → pull (1.00)

 Sentence

Pull the dog.

👉 Real-time ASL Translator

[Start WebCam](#)[stop WebCam](#)[show Landmarks](#)

📷 Webcam Feed



🕒 Prediction

📋 Predicted Glosses

work (0.48) → dog (0.92) → dog (0.82)

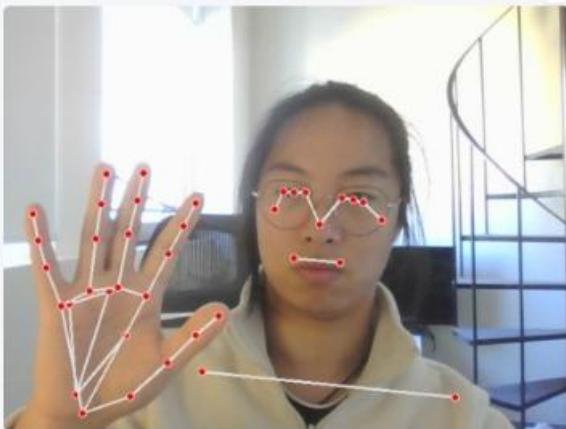
💬 Sentence

I work with dogs.

[show Landmarks](#)

🕒 RUNNING... Stop Deploy

📷 Webcam Feed



🕒 Prediction

📋 Gloss

GLOSS: HELLO MY NAME

💬 Sentence

Hello, my name is John.

Alt + A