In [ ]: from hta.trace\_analysis import TraceAnalysis
analyzer = TraceAnalysis(trace\_dir = "/home/tilak/Alinet\_optim/inference-opt

2024-01-26 17:58:32,716 - hta - trace.py:L389 - INFO - /home/vrushank/Docume nts/GitHub/Deep-Learning-Projects/diffusion-policy-inference/log/diffusion/ 2024-01-26 17:58:32,717 - hta - trace\_file.py:L94 - INFO - Rank to trace file map:

{0: '/home/vrushank/Documents/GitHub/Deep-Learning-Projects/diffusion-policy -inference/log/diffusion/vrushank\_177412.1706309520293846892.pt.trace.json'} 2024-01-26 17:58:32,717 - hta - trace.py:L535 - INFO - ranks=[0] 2024-01-26 17:58:32,721 - hta - trace.py:L118 - INFO - Parsed /home/vrushan k/Documents/GitHub/Deep-Learning-Projects/diffusion-policy-inference/log/diffusion/vrushank\_177412.1706309520293846892.pt.trace.json time = 0.00 seconds 2024-01-26 17:58:32,744 - hta - trace.py:L671 - WARNING - ProfilerStep not found in the trace. The analysis result may not be accurate.

In [8]: temporal\_breakdown\_df = analyzer.get\_temporal\_breakdown()

/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function min> is currently using SeriesGroup By.min. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "min" instead.

/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function max> is currently using SeriesGroup By.max. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "max" instead.

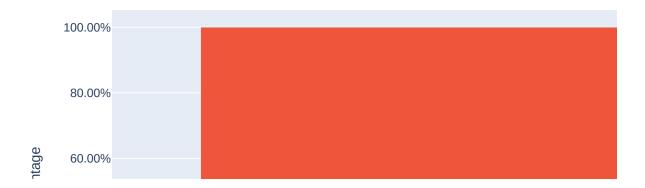
/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function min> is currently using SeriesGroup By.min. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "min" instead.

/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function max> is currently using SeriesGroup By.max. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "max" instead.

#### Temporal breakdown across ranks



```
In [5]: kernel_breakdown_df = analyzer.get_gpu_kernel_breakdown()
```

/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function min> is currently using SeriesGroup By.min. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "min" instead.

/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function max> is currently using SeriesGroup By.max. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "max" instead.

/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function min> is currently using SeriesGroup By.min. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "min" instead.

/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function max> is currently using SeriesGroup By.max. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "max" instead.

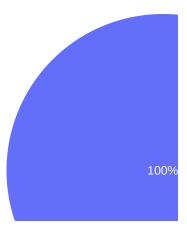
/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function min> is currently using SeriesGroup By.min. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "min" instead.

/home/vrushank/anaconda3/envs/diffusion/lib/python3.11/site-packages/hta/utils/utils.py:108: FutureWarning:

The provided callable <built-in function max> is currently using SeriesGroup By.max. In a future version of pandas, the provided callable will be used directly. To keep current behavior pass the string "max" instead.

## Kernel Type Percentage Across All Ranks



## Kernel type "COMPUTATION" - kernel distribution on each rank



#### Kernel type "COMPUTATION" - sm86\_xmma\_fprop\_implicit\_gemm\_inc



## Kernel type "COMPUTATION" - sm86\_xmma\_fprop\_implicit\_gemm\_tf3





Kernel type "COMPUTATION" - std::enable\_if<!(false), void>::type inter



# Kernel type "COMPUTATION" - void at::native::(anonymous namespac



## Kernel type "COMPUTATION" - void at::native::(anonymous namespac







## Kernel type "COMPUTATION" - void at::native::vectorized\_elementwise





Kernel type "COMMUNICATION" - kernel distribution on each rank

Kernel type "MEMORY" - kernel distribution on each rank

#### Kernel type "MEMORY" - Memset (Device)

