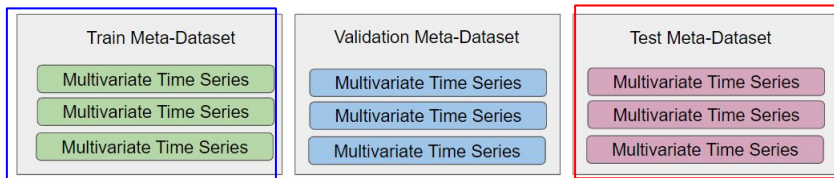


Data evaluation - Baselines

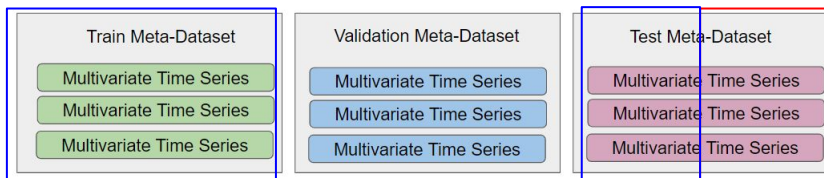
Sebastian Pineda-Arango

Evaluation types

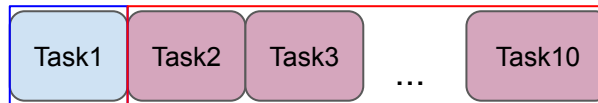
- Without fine-tuning (WOFT)



- On 50% (50-50)



- With fine-tuning (WFT)



Baselines

- **Gaussian Processes (GP)**
- **XG-Boost**
- **Resnet** (Wei, W. W. S. (2011). Time Series Regression. In *International Encyclopedia of Statistical Science* (pp. 1607–1609). Springer Berlin Heidelberg).
- **VRADA** (Purushotham, S., Carvalho, W., Nilanon, T., Liu, Y., & Angeles, L. (2017). Variational Recurrent Adversarial Deep Domain Adaptation, (2016), 1–11.)

To do (last week)

- Evaluation on Resnet Done
- Implementation of LSTM and FCN (Base models) Doing
- Hyperparameters of VRADA Done
- Graphical analysis Done

Results (1)

	WOFT			
	XGBOOST	GP	RESNET	VRADA-S
POLLUTION	0.043028	-	0.051254	0.043168
HR	0.076297	-	0.057630	0.084135
BATTERY	0.036035	-	0.037211	

Results (2)

	50-50			
	XGBOOST	GP	RESNET	VRADA-S
POLLUTION	0.0463201	-	0.041743	
HR	0.0600014	-	0.043528	
BATTERY	0.0616114	-	0.035870	

Results (3)

	WFT			
	XGBOOST	GP	RESNET	VRADA-S
POLLUTION	-	0.049127	0.048736	0.042297
HR	-	0.118233	0.060652	0.082388
BATTERY	-	0.012753	0.036700	

To do (this week)

- Evaluation on VRADA
- Evaluation and comparison of LSTM and FCN
- Graphical analysis

Timeline

Time	Tasks
August	Literature review, data exploration
September	Baselines implementation
October	Proposed model implementation
November	Experiments on models (Hyper. Tun., etc.)
December	Results evaluation and adjustments
January	Results report and thesis finalization