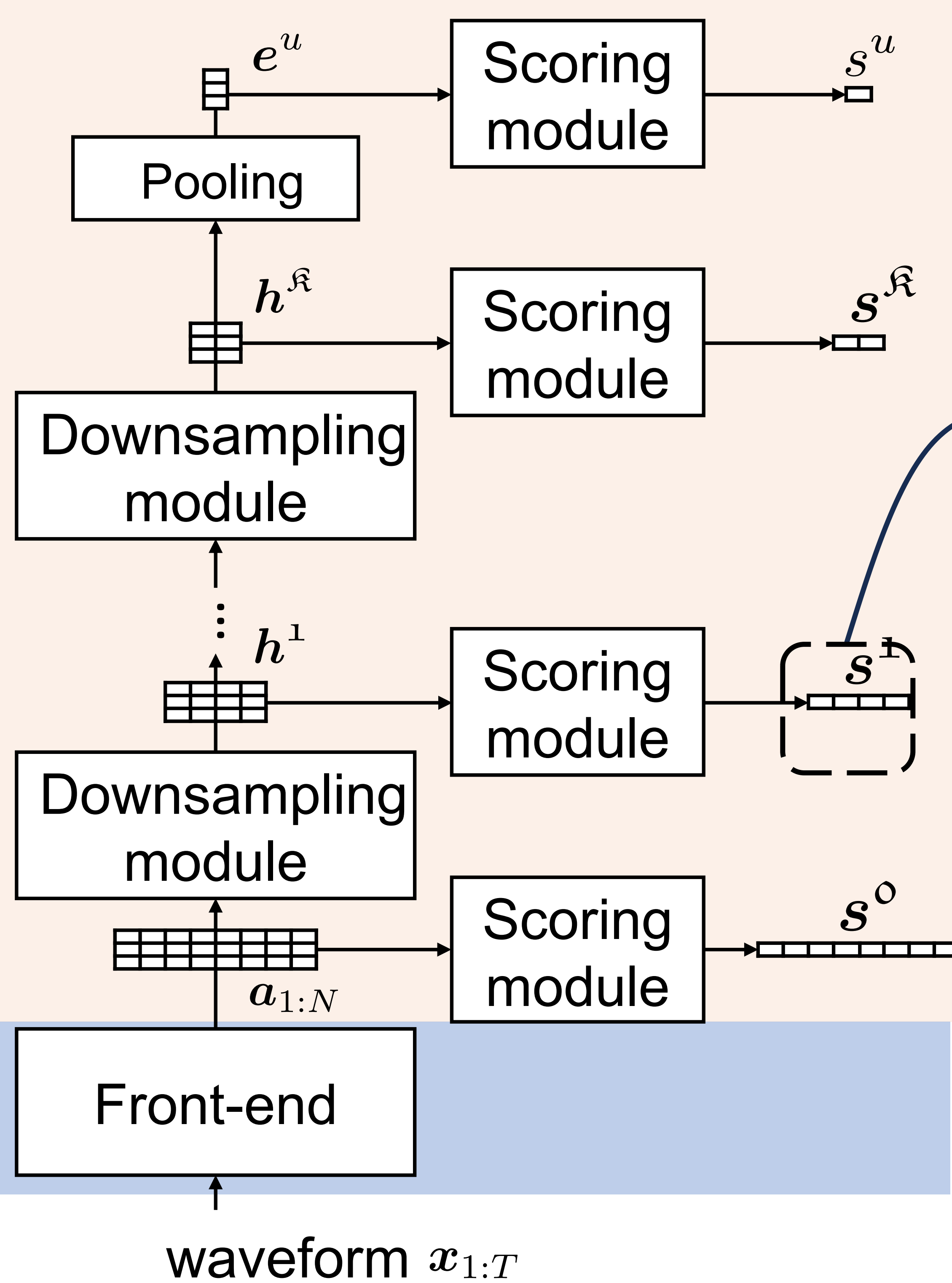



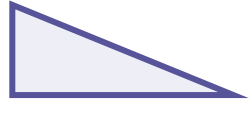
# Range-Based EER vs. Point-Based EER



*Range-based and point-based EER (%) of multi-reso. CM in the eval. set of PartialSpoof.*  
Each **row** represents the temporal resolution for **training** and shares the same predicted scores, while each **column** presents the temporal resolution for error **measurement**.)

Predicted Score	Reso. of Training	Range-based EER	Point-based EER						
			10	20	40	80	160	320	640
$s^0$	20	30.40	29.78	12.84	11.94	10.52	8.42	5.96	4.06
$s^1$	40	30.11	29.93	29.94	11.94	10.51	8.43	5.98	4.10
$s^2$	80	30.65	30.12	30.12	30.15	10.92	8.70	6.14	4.15
$s^3$	160	31.36	30.49	30.50	30.52	30.56	9.24	6.40	4.11
$s^4$	320	33.91	33.39	33.38	33.41	33.45	33.48	6.34	3.97
$s^5$	640	37.38	37.53	37.53	37.54	37.56	37.56	37.54	5.19

**Point-based EER** is sensitive to the measurement resolutions.

- **Upper triangular**  : measurement reso. > training reso.
- **Diagonal**: measurement reso. = training reso.
  - “Underestimation”: Smaller value only means the task is easier and does NOT mean that spoof localization is more accurate.
- **Lower triangular**  : measurement reso. < training reso.

**Range-based EER** can measure errors at a finer level.