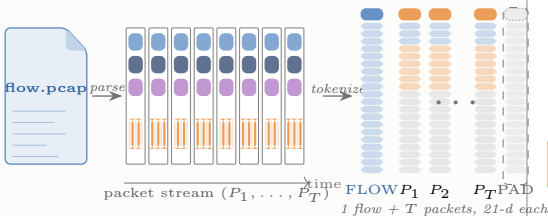


(a) Tokenization

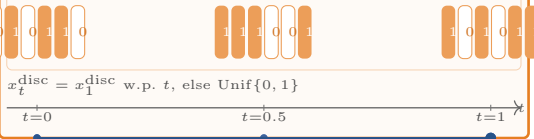


(b) Mixed-state path ★

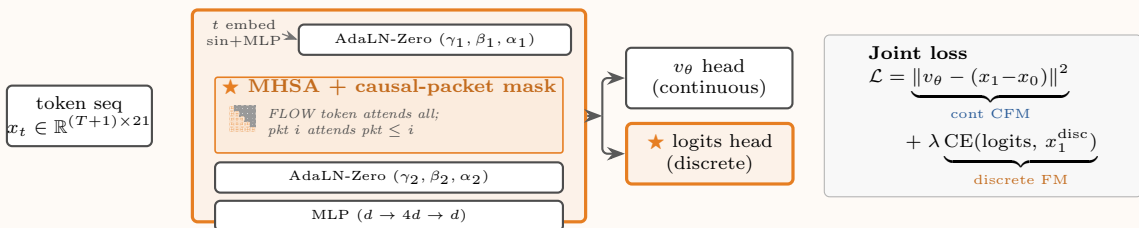
continuous (size, IAT, win)

$$x_t = (1-t)x_0 + tx_1, \quad x_0 \sim \mathcal{N}(0, I)$$

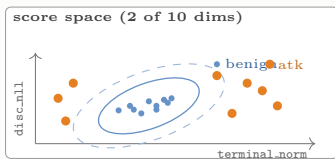
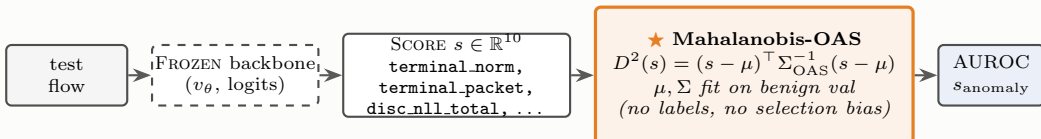
discrete (dir, 5 TCP flags), kept w.p. t else uniform



(c) Causal-Packet Velocity Field ★ + joint loss



(d) Inference & Mahalanobis-OAS router ★



Why a router? Each score has a different best regime: **terminal_norm** dominates volumetric attacks, **disc_nll** captures protocol-flag shifts (transfer-stable), **terminal_packet** catches packet-level anomalies. Mahalanobis-OAS aggregates the score vector *without per-task score selection*.