PROBLEM:

- Build RTS/JIT models, that are adaptive/online.
  - ↳ fast adaptive tree
  - → fast auto-encoders

  How to learn online learning
  Albert Bifett

  Moa (Wika)
  Scikit-learn
  multiflow

Streaming Data Properties.

- continuous & temp. ordered
- potentially infinite
- con't scan multiple times
- fast arrival - and -abrubpt.
  - ↳ concept
  - ↳ features
- use approx. not exact.

Multi-class Imbalance Stream

- Noise & anomilees
- mult. classes >2. ofen OVB, OVA
- extreme skewed data/fast
- overlapping classes
- within-class imbalance

Questions

I. Combine undersampling/over : without multiple binary sets.

Methods

SCUT-DS: Window based method

↳ Majority classes: cluster-based undersampling — to address class imbalance

↳ measuring minority recalls (recognition rates)

→ prequential evaluation.   feature/concept drift.

→ sampling helps learning