

TWC: Medium: Collaborative: Efficient Repair of Learning Systems via Machine Unlearning

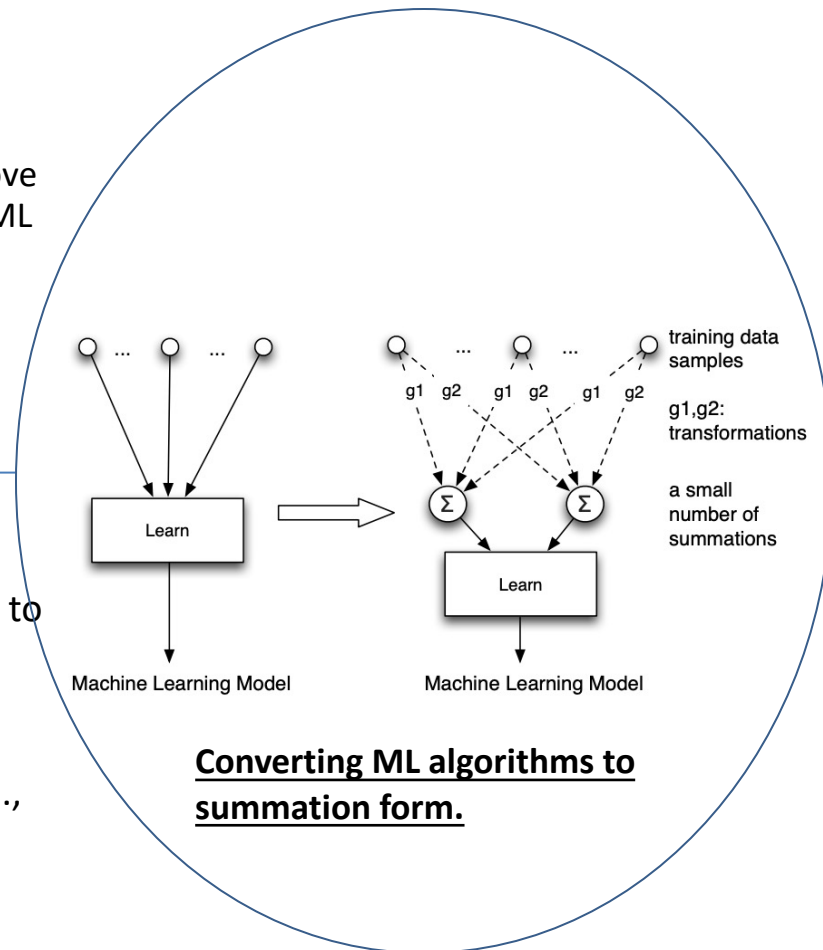


Challenge:

- How to efficiently remove training samples from ML models

Solution:

- Converting ML Model to summation form
- Efficiently removing samples from the intermediate layer, i.e., the summations



Scientific Impact:

- The proposed project can be used to remove private-related data samples.
- The project leads to many follow-ups, e.g., IEEE S&P'21 paper on “Deep” Unlearning.

Broader Impact and Broader Participation:

- The project will help providers in machine learning as a service.
- The PIs involve machine unlearning in various courses

1854000, Yinzhi Cao, Johns Hopkins University