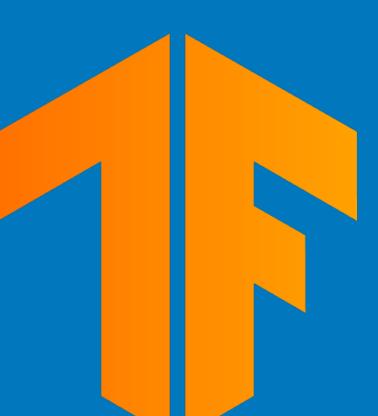


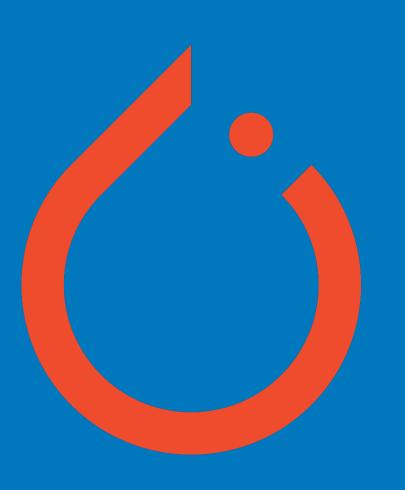
EASTESTIMATOR

Two Worlds in One

A new multi-framework approach



The speed you love, now with a flexible and performant pythonic workflow



Make your life easier with readymade modules, without forsaking flexibility

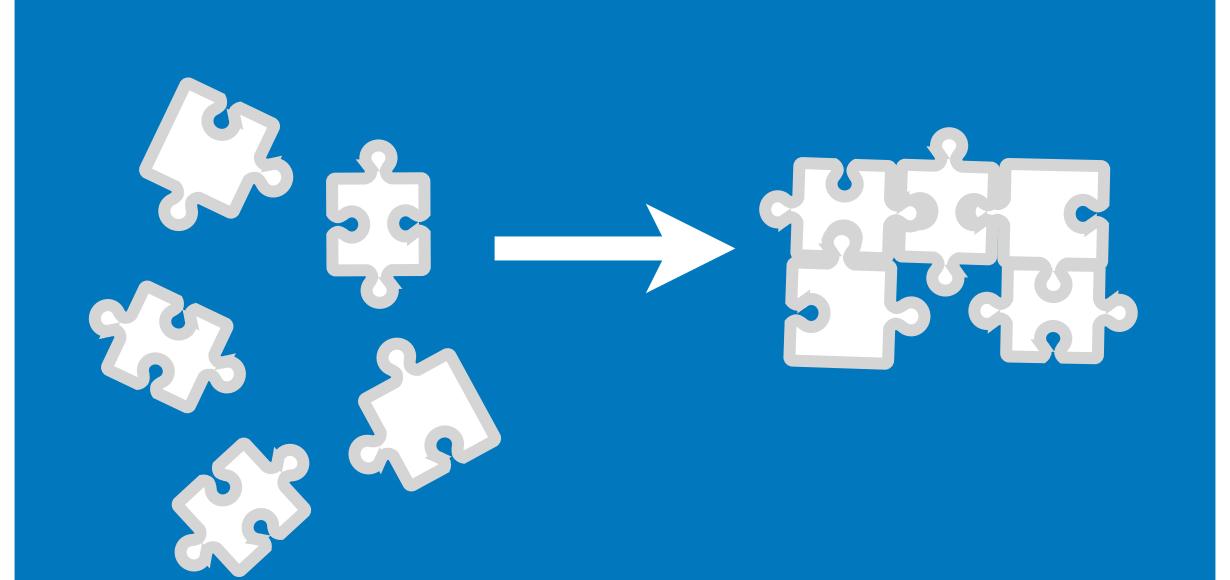
Pre-Bundled Power

Ready-made modular components

- * Adversarial Hardening
- * Advanced Augmentation
- * Dynamic Scheduling
- * Summarization
- * LR Controllers
- * XAI

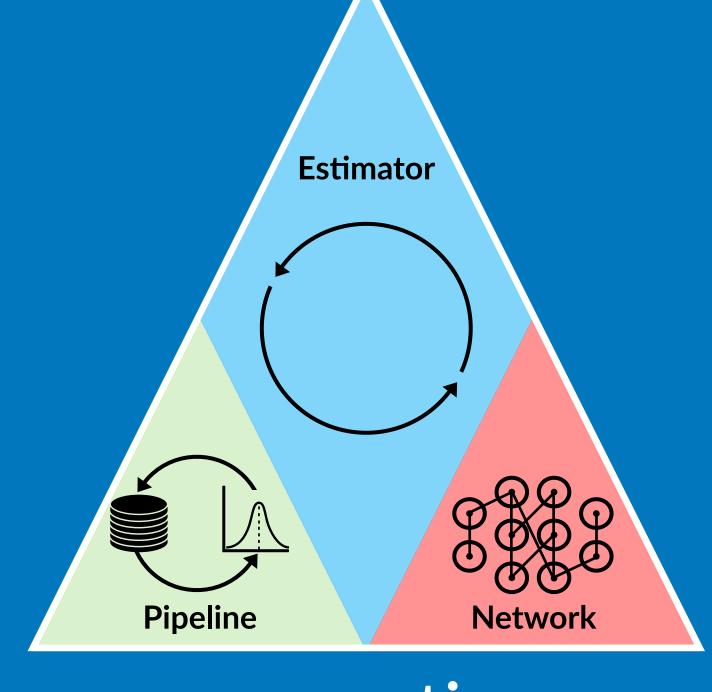
AppHub

SOTA solutions, all in one place



Flex Your Net

Operators construct workflows, Traces control training



Less coding, more creating

Easy as 1, 2, 3

Deep Learning in 3 APIs

Cycle-GAN [1] PG-GAN^[2] arXiv ≈2700 Lines [3] ≈5000 Lines [4] ≈1100 Lines [5] ≈300 Lines [6] ≈500 Lines [6]

Operators Operator Graph: mage Read Network **(x:** Batch Data: {x: "image.png"} Operator y: [0.9, 0.01, ...]} **Pipeline** Network FastEstimator Expression [MinMax(inputs='x', outputs='x'), Model(inputs='x', outputs='y_pred'), Loss(inputs=('y', 'y_pred'), outputs='loss1'), Attack(inputs=('x', 'loss1'), outputs='x_adverse'), Loss Model(inputs='x_adverse', outputs='y_pred'), Loss(inputs=('y', 'y_pred'), outputs='loss2'), AvgLoss(inputs=('loss1', 'loss2'))] x_adverse y_pred Model **Epoch Loop** Trace 1 **Trace 2** Trace N Train Start Train End Start **Epoch** CA Start {x:[[x]] **Batch Loop** Epoch End Epoch Start y: [0.9, 0.01, ...]} — Batch End



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- * Aritra Chowdhury
- * Purujit Bahl
- * Vivek Soni
- * Yun-Chan Tsai
- * Rajesh Tamada
- * Gaurav Kumar
- * Caroline Favart
- * V. Ratna Saripalli * Gopal Avinash

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- 3. https://github.com/junyanz/pytorch-CycleGAN-and-pix2pix
- 4. https://github.com/tkarras/progressive_growing_of_gans
- 5. https://github.com/simontomaskarlsson/CycleGAN-Keras
- 6. https://github.com/fastestimator/fastestimator
- 7. https://www.tensorflow.org
- 8. https://pytorch.org 9. https://keras.io

Make your next estimator a **FastEstimator**

