# Notes of the PLE / PLP workgroup meeting

Present: Yuxi Tian, Alex Rekkas, Andrew Williams, Ashley Simon, Soleded Cepeda, Dani, Ed Burn, Henrik John, Jenna Reps, Jing Huang, Chris Knoll, Kristin Kostka, Patrick Ryan, Peter Rijnbeek, Martjin Schuemie, Anthony Senna, Vojtech Huser, Jamie Weaver,

February 6, 2020

Yuxi present on his work using GPUs to optimize our logistics regression

Simulations show GPU good at fitting larger sample sizes with little extra compute time. Having more covariates does slow down the GPU, due to the sequential nature of the CCD.

Cross-validation can be done much faster, running folds and replicates at the same time. Could even run multiple hyperparameter values at once. Using interleaved data pulls increases efficiency.

Comparing to GLMNet we’re not that much fast, but are an order of a magnitude better at estimation.

Peter: can we use it? Yuxi: not yet for public consumption. Working on it

Chris: interleave strategy automated? Yuxi: no, currently manual choice

Martijn: how specific is your optimal solution to the specific hardware? Yuxi: haven’t evaluated that yet. Did run it on the GPU of my laptop. Kristen: I have multiple hardware configurations for testing, happy to run once available.