Labs **Optimization for Machine Learning**Spring 2020

#### **EPFL**

School of Computer and Communication Sciences

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github.com/epfml/OptML\_course

# Problem Set 7, due April 12, 2019 (Newton)

### Non-convex

Solve Exercises 35, 36, 37 from the lecture notes. These exercises are carried over from last week.

## **Newton's Method**

Solve Exercises 43, 45 from the lecture notes.

## **Quasi-Newton Methods**

Solve Exercise 48.

### **Fixed Point Iteration**

The Jupyter notebook in template/ contains the solution from Lab 03's exercise on fixed point iteration. Please complete the notebook and adapt the algorithm to use Newton updates.