

## Optimization for Machine Learning (Spring 2026): Homework 5

- LO4ML stands for the textbook *Linear Algebra and Optimization for Machine Learning*.
- You **must email your submission** as a **PDF file** to kbala@wsu.edu. You are welcome to write answers by hand and scan the pages. Put all the images on a PDF file, though.
- Your file name should identify you in the following manner. If you are Tuong Lu Kim, you should **name your submission TuongKim\_Hw5.pdf**. If you want to add more bits to the title, e.g., Math565, you could name it TuongKim\_Math565\_Hw5.pdf, for instance. But you should **start the file name with TuongKim. And please avoid white spaces in the file name.**
- **Begin the SUBJECT of your email submission with the same FirstnameLastname, expression, e.g., “TuongKim Hw5 submission”.**
- **This homework is due by 10:00 PM on Monday, April 20.**

1. (25) LO4ML Problem 7 from Page 295. There is a typo in the objective function: it should be  $\min \frac{1}{2} \mathbf{w}^T Q \mathbf{w} + \mathbf{c}^T \mathbf{w}$ .
2. (30) LO4ML Problem 14 from Page 296.