

# Machine Learning 1 – Exercise 5

Machine Learning for Computer Vision  
TU Dresden

Solutions to any part of any exercise will be accepted as separate postings in the thread entitled **Exercise 5: Solution** of the lecture forum<sup>1</sup> until **Feb 1st, 18:00**. The solutions will not be graded. At the end of this term, the most highly voted solution will be awarded with a book prize.

## 1 Conditional Graphical Models

In the lecture notes<sup>2</sup>:

- a) Prove Lemma 14
- b) Prove Lemma 15
- c) Prove Lemma 16, using (9.21).
- d) Prove Lemma 17
- e) Prove Lemma 18
- f) Prove Lemma 19

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<sup>1</sup><https://bildungsportal.sachsen.de/opal/auth/RepositoryEntry/26617479170/CourseNode/102502724177602>

<sup>2</sup><https://mlcv.inf.tu-dresden.de/courses/wt20/ml1/ml1-lecture-notes.pdf>