

EP3260: Machine Learning Over Networks

Peer-review of HW1 of group 2

Stefanos Antaris^{*1}, Amaru Cuba Gyllensten^{†1,2},
Martin Isaksson^{‡1,2,3}, Sarit Khirirat^{§1}, and Klas Segeljak^{¶1,2}

¹*KTH Royal Institute of Technology*

²*RISE AI*

³*Ericsson Research*

February, 2019

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1 Homework assignment

1.1 General comments

- In general the assignment is completed and the proofs are correct. Except from some minor typos, there is no severe mistake in the proposed proofs. However, the

^{*}antaris@kth.se

[†]amaru.cuba.gyllensten@ri.se

[‡]martisak@kth.se

[§]sarit@kth.se

[¶]klasseg@kth.se

submitted homework is handwritten and therefore not easy to read after scanning. We suggest typesetting in L^AT_EX for the next homeworks.

1.2 Strong convexity

- The provided proof is clean and really useful the fact that the authors describe the first, second, and monotone gradient conditions for convexity.

1.3 HW1 a) a) — the Polyak-Łojasiewicz inequality

- Typo: Missing transpose in line 2.

1.4 HW1 a) b)

- The proof seems to be correct. However, some text ended up in the margin which made it difficult to read and understand.

1.5 HW1 a) c)

- The proof is correct and written in a manner that everyone can understand

1.6 HW1 a) d)

- Good, explicitly written, proof.

1.7 HW1 b)

The proofs seem to be correct and explained in details.

1.8 HW1 c) — Resource allocation

The proofs from HW1 c are correct and detailed. Specifically, for the first part, the Lagrange dual function is used properly and it is really useful the fact that the Hessian is explicitly written. However, having a handwritten proof with matrices makes the reader difficult to follow the proof and the correctness of it.