PURDUE UNIVERSITY · CS 52000
COMPUTATIONAL OPTIMIZATION

HOMEWORK
David F. Gleich
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Please answer the following questions in complete sentences in a typed manuscript and submit the solution on Gradescope by the due date there.

Yourself

1. Please tell me about yourself: name, MS/PhD objective, adviser (if you have one), year in program, research area.
2. Why are you taking the class?

The course

3. Do you want to see formal proofs that the optimization algorithms work, or would intuitive arguments be okay?
4. Would you rather see more optimization software packages and ideas and less depth, or would you rather have more depth and fewer ideas?
5. What have other professors done that you've found helps you learn?

Background

6. Tell me about your previous linear algebra, matrix analysis, or numerical analysis classes. What topics did you cover?
7. Tell me about any mathematical analysis classes you've had.

Numerical computing software

8. Have you used Julia before?
9. Have you used Matlab before?
10. Have you used NumPy/SciPy before?
11. Have you used Tensorflow/PyTorch before?
12. Have you used R before?
13. Have you used Mathematica before?
14. Any other numerical computing packages?
15. Have you used any optimization software before, if so, which one(s)?

The course

17. Which of the topics from the syllabus are you most excited about?
18. Anything missing from the syllabus you were hoping to learn about?

Videos

19. The courses for this class will be recorded, do you have any reservations about that?