# SMU MSDS 7337 Mid-Term Exam Summer 2019

# Short Essay Responses

(25 pts each, 300-500 words each).

1. Select one career or industry that makes use of applied NLP.
   1. Explain generally how that field or career utilizes NLP.
   2. Explain at least some methods of NLP that are very likely to be used in the career or industry you selected.
   3. Give at least one specific example of a use case for NLP within the chosen field, and explain how the problem or situation is (or could be) improved by applying NLP.
2. Choose one of the “trade-offs” in NLP that was covered in the materials for this course.
   1. Explain the trade-off in general terms. Define the two choices.
   2. Explain the benefits and weaknesses of each side of the trade-off. Include at least one benefit and one weakness of each.
   3. Describe a work-situation that would make one of the choices in the trade-off much better, in terms of practical outcomes for you and your stakeholders on a project.

# Essay Response

(50 pts, 600-1000 word essay).

1. Describe the overall NLP “pipeline” for a text analytics project as described in the materials of this course. First give an overview, then briefly describe and explain each phase of the pipeline.
2. For each phase of the pipeline, either (a) recommend a specific tool for getting the job done, e.g. a Python package, and a reason why you recommend it, or (b) explain a choice that must be made, where you would configure the process for that step very differently depending on the kind of application.

Note: For 2, do each of (a) and (b) at least once.