

The main contributions that Elliot made were the following. When we first met to discuss our plans for the report we went over the derivations. Elliot was able to help us understand the fact that we were dealing with a uniform discrete distribution and as such the pdf and cdf were not so complicated to find. I say that Elliot did about 65% of the work as far as derivations go. This is because while he did not write much (we did the derivations on paper), he contributed extensively to checking our work.

Elliot also created the concepts for our custom estimators ($2 \times \text{median}$ and $2 \times (\text{max} - \text{median})$). Later in the project, while we were planning to use the ML estimator as the best one for solving the German Tank problem, Elliot also suggested that we use a combination of the minimum and maximum in order to create a more accurate estimator that does not always fall short of the actual value. Thus, since Elliot created the minMax estimator that became our final solution I believe that he contributed a great deal to the project.

The vast majority of the initial write-up was contributed by me (Dean). The initial draft was created by me with a few suggestions from Siang. I did the write-up (which was later revised for grammar and a few additions such as jack-knife sampling by Elliot). I also created the figures (the histograms for example) that were included in the final draft. I additionally created the original table. This was all done on a Google Doc. Once Elliot suggested that we use a minMax estimator rather than the ML estimator, Siang helped me revise the write-up such that we were speaking of the minMax estimator as our most viable one. I also helped fact-check the derivations section (the initial section) of the pre-writeup part of our project.

I also contributed a References section so that the reader would know the kind of material that I had looked at to make our report better from a design perspective. When we had to put our report into R Markdown (we realized that our variables needed to be dynamic, that is, to change every time we ran the simulations so that the text of our report coincided with the results), I converted all of the equations we had inserted into the Google Doc (the derivations and estimators) into LaTeX format for the purposes of inserting them into R Markdown.

Siang did most of the R Markdown part of our report. He had a few suggestions from Elliot but ultimately he did most of the R code that created the histograms and values to populate our table in the first place. Once we were successfully able to complete the write-up in a Google Doc he helped place the equations as well as the text into R Markdown. We worked together on some trouble-shooting errors such as over- or under-indenting. Altogether Siang was very good at helping write up and contribute to the derivations section as well as the final write-up.

Siang read through the final report and decided that it would be important to phrase the original question not only in terms of German tanks but also in terms of taxis. I would say that his contribution to the revision and commenting of the R Code was quite extensive. Although he did not really write much of the text within the report, his ideas are nonetheless implemented. Furthermore, the table we

included was created by Siang in R Markdown as an adaptation of the one that I had created in the Google Doc.