# Kaggle Competition: Find the "Largest" Digit

COMP 551-001, March 2018

# Team [Team Name]

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Abstract—The main text of the report should not exceed 6 pages. References and appendix can be in excess of the 6 pages. The format should be double-column, 10pt font, min. 1" margins.

#### I. Introduction

Briefly describe the problem and summarize your approach and results.

#### II. FEATURE DESIGN

Describe and justify your pre-processing methods, and how you designed and selected your features.

#### III. ALGORITHMS

Give an overview of the learning algorithms used without going into too much detail in the class notes (e.g. SVM derivation, etc.), unless necessary to understand other details.

- A. SVM or logistic regression
- B. Neural network
- C. Third approach

# IV. METHODOLOGY

Include any decisions about training/validation split, distribution choice for naïve bayes, regularization strategy, any optimization tricks, setting hyper-parameters, etc.

## V. RESULTS

Present a detailed analysis of your results, including graphs and tables as appropriate. This analysis should be broader than just the Kag- gle result: include a short comparison of the most important hyperparam- eters and all 3 methods you implemented.

# VI. DISCUSSION

Discuss the pros/cons of your approach & methodology and suggest areas of future work.

#### STATEMENT OF CONTRIBUTIONS

Briefly describe the contributions of each team member towards each of the components of the project (e.g. defining the problem, developing the methodology, coding the solution, performing the data analysis, writing the report, etc.) At the end of the Statement of Contributions, add the following statement:

We hereby state that all the work presented in this report is that of the authors.

#### REFERENCES

Optional.

### APPENDIX

Optional. Here you can include additional results, more detail of the methods, etc.