YOUR PROJECT TITLE

First1 Last1, First2 Last2, etc

NUS-ISS, National University of Singapore, Singapore 119615

ABSTRACT

The abstract should consist of one paragraph describing the motivation for your project and a high-level explanation of the methodology you used and the results obtained. Note: this *two-column* project report template is modified from that used in Stanford University CS230, https://cs230.stanford.edu/.

Keywords: Please provide (up to four) keywords

1. INTRODUCTION

Explain the problem statement and why it is important. Clearly state what the input and output are.

Add one paragraph to clearly state the highlights (i.e., the selling point) of your project. The highlights of this project can be summarized as follows.

2. LITERATURE REVIEW

Present relevant references (e.g., papers, industrial products), group them into categories based on their approaches, and discuss their strengths and weaknesses.

3. PROPOSED APPROACH

Describe your proposed system. Use a system architecture or flow chart to illustrate your proposed system. For each module, give a detailed description of how it works.

4. EXPERIMENTAL RESULTS

4.1. Dataset

Describe your dataset. If you collected yourself, describe how the data was captured. Include examples of your data in the report (e.g. include an image, show a waveform, etc.).

4.2. Implementation details

Data augmentation? Model training configurations, e.g., optimizer, epoch, batch size, learning rate, GPU specification.

4.3. Performance metrics

What metrics are used: accuracy, precision, etc? Provide equations for the metrics.

4.4. Experimental results

You need to have both *quantitative* and *qualitative* results.

4.5. Ablation study

Conduct ablation study to evaluate how various components contribute to its final performance (Table 1).

Table 1. The ablation study.

Module A	Module B	Metric X	Metric Y
-	$\checkmark$	XXX	XXX
$\checkmark$	-	XXX	XXX
$\checkmark$	$\checkmark$	XXX	XXX

4.6. Discussions and limitations

Include some examples of where your approach failed and a discussion of why certain approaches failed or succeeded.

5. CONCLUSIONS AND FUTURE WORK

Summarize your report. For future work, if you had more time, more team members, or more computational resources, what would you explore? It would be good to have around 10-15 references [1] for the whole report.

6. AUTHOR CONTRIBUTIONS

Describe the contributions of each team member.

7. REFERENCES

[1] K. He, X. Zhang, S. Ren, and J. Sun, "Deep residual learning for image recognition," in *IEEE Conf. on Computer Vision and Pattern Recognition*, Las Vegas, NV, USA, Jun. 2016, pp. 770–778.