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# A TEMPLATE FOR ME336 FINAL PAPER

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THIS IS A FINAL PAPER TO BE SUBMITTED FOR ME336 @ SUSTECH:  
[HTTPS://ANCORASIR.COM/?PAGE\\_ID=2320](https://ancorasir.com/?page_id=2320)

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## ABSTRACT

It seems the COVID-19 has caused far more troubles than we expected. It forces us to make new (unwanted) changes to the final presentation. After discussing with the teaching team, I decide to make the following changes to this semester's final presentation (assignment). For the final assignment, each student is asked to reproduce one of the tasks from the 100 tasks on RL Bench Github Page, explain detailed steps on your reproduction process, and write an academic review of this particular manipulation task for robot learning from literature in a 6-page full paper using this template. Besides this paper, you also need to organize your code in a zip file and prepare a (10-min) PowerPoint presentation to be submitted before the Thursday (May 27) noon at this link.

**Keywords** First keyword · Second keyword · More

## 1 Introduction

If any trouble framing this paper, just think of it as a conference paper or a technical report. The easiest way to work with latex is using Overleaf on your browser (turn on VPN service to have a better connection with overseas server), or you can also use your local Latex installation to work on this paper. Links to download source code to this template is hosted here.

In this section, please give a brief introduction of the task you've chosen, explain the research questions behind this task, and why it becomes a research subject for robot learning field of research.

## 2 Reproduction of the Task

In this section, please explain the detailed steps of your reproduction of the chosen task. Be sure to make a choice of the task before May 18 noon by posting on the WeChat group to avoid two students choosing the same task.

You are encouraged to include the code and pictures with description to better explain your steps of reproduction. You are also encouraged to write your own comments while reproducing the task, and share your understanding.

## 3 Task Analysis

In this section, please review and summarize the research questions behind this manipulation task for robot learning. Explain each research question in separate paragraphs and avoid mixing them into the same one. Use graphics, illustrations, and equations to explain the mathematical fundamentals of the task and why it is challenging.

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## 4 Literature Review

In this section, please provide a detailed review of this task from the literature. Please use proper citation formats and review in depth.

Below are some sample latex code that might be helpful.

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### 4.1 Headings: second level

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$$\xi_{ij}(t) = P(x_t = i, x_{t+1} = j | y, v, w; \theta) = \frac{\alpha_i(t) a_{ij}^{w_t} \beta_j(t+1) b_j^{v_{t+1}}(y_{t+1})}{\sum_{i=1}^N \sum_{j=1}^N \alpha_i(t) a_{ij}^{w_t} \beta_j(t+1) b_j^{v_{t+1}}(y_{t+1})} \quad (1)$$

#### 4.1.1 Headings: third level

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## 5 Examples of citations, figures, tables, references

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The documentation for natbib may be found at

<http://mirrors.ctan.org/macros/latex/contrib/natbib/natnotes.pdf>

Of note is the command `\citet`, which produces citations appropriate for use in inline text. For example,

`\citet{hasselmo}` investigated\dots

produces

Hasselmo, et al. (1995) investigated...

<https://www.ctan.org/pkg/booktabs>

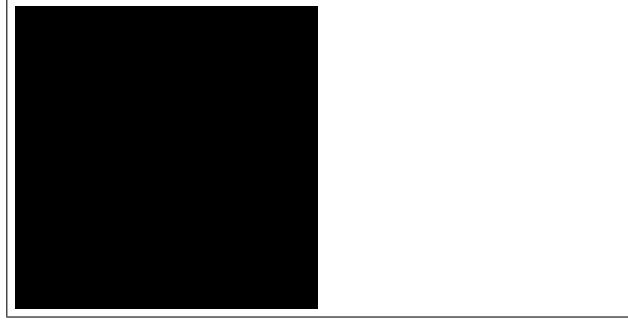


Figure 1: Sample figure caption.

Table 1: Sample table title

Part		
Name	Description	Size ( $\mu\text{m}$ )
Dendrite	Input terminal	$\sim 100$
Axon	Output terminal	$\sim 10$
Soma	Cell body	up to $10^6$

## 5.1 Figures

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## 5.2 Tables

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## 5.3 Lists

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- consectetur adipiscing elit.
- Aliquam dignissim blandit est, in dictum tortor gravida eget. In ac rutrum magna.

## References

- [1] George Kour and Raid Saabne. Real-time segmentation of on-line handwritten arabic script. In *Frontiers in Handwriting Recognition (ICFHR), 2014 14th International Conference on*, pages 417–422. IEEE, 2014.
- [2] George Kour and Raid Saabne. Fast classification of handwritten on-line arabic characters. In *Soft Computing and Pattern Recognition (SoCPaR), 2014 6th International Conference of*, pages 312–318. IEEE, 2014.

<sup>2</sup>Sample of the first footnote.

- [3] Guy Hadash, Einat Kermany, Boaz Carmeli, Ofer Lavi, George Kour, and Alon Jacovi. Estimate and replace: A novel approach to integrating deep neural networks with existing applications. *arXiv preprint arXiv:1804.09028*, 2018.