

An MCM Paper Made by Team 1234567**Summary**

Here is the abstract of your paper.

Firstly, that is ...

Secondly, that is ...

Finally, that is ...

$$F(\omega) = \int_{-\infty}^{\infty} f(t) e^{-i\omega t} dt$$

$$f(t) = \frac{1}{2\pi} \int_{-\infty}^{\infty} F(\omega) e^{i\omega t} d\omega$$

Keywords 1

Contents

1	Introduction	3
1.1	Problem Background	3
1.2	Restatement of Problem	3
1.3	Our work	3
2	Assumptions	3
3	Notations	3
4	Data Preprocessing	4
4.1	Basic Data Preprocessing	4
4.2	Data Mining	4
5	Task1:	4
5.1	Details about Model 1	4
6	Task2:	5
6.1	Conclusion of Model 2	5
6.2	Commetary on Model 2	6
7	Task3	6
8	Task4	6
9	Sensitivity Analysis	6
10	Model Evaluation	6
10.1	Strengths	6
10.2	Weaknesses	6
11	Conclusion	6
	Memorandum	7
	References	7
	Appendix A: Further on L^AT_EX	8
	Appendix B: Program Codes	8

1 Introduction

1.1 Problem Background

Here is the problem background ...

Two major problems are discussed in this paper, which are:

- Doing the first thing.
- Doing the second thing.
doing
doing11

1.2 Restatement of Problem

A literatrue[1] say something about this problem ...

1.3 Our work

We do such things ...

1. We do ...
2. We do ...
3. We do ...

2 Assumptions

3 Notations

The primary notations used in this paper are listed in Table 1.

Table 1: Notations

Symbol	Definition
A	the first one
b	the second one
α	the last one

4 Data Preprocessing

4.1 Basic Data Preprocessing

4.2 Data Mining

5 Task1:

5.1 Details about Model 1

The detail can be described by equation (1):Equation 1:

$$\alpha + \beta = \gamma \quad (1)$$

$$\alpha + \beta = \gamma$$

$$\alpha$$

$$\begin{aligned} A + B + C + D + E + F \\ = G + Q + W + E + R + T + Y \\ = A + S + D + F + G + H + J \end{aligned} \quad (2)$$

$$F(x) = \begin{cases} 0 & , \text{if } x < 0 \\ x + 1 & , \text{if } x > 0 \\ 1 & , \text{otherwise} \end{cases} \quad (3)$$

Table 2: Variable Name

Variable Name	Code	Definition
Whether Host Country	<i>is host</i>	Whether the country is the host(1 for host,0 for non-host)
Medal Expectation Increment *Personnel Expectation Increment	<i>medal_increment * personnel_increment</i>	Product of medal expectation increment and personnel expectation increment
Sport Advantage Coefficient	<i>sport_adv</i>	Advantage coefficient of a specific sport
Country Level	<i>country_lvl</i>	The level of the country in the competition (ordered by rank)

Continued on next page

Table 2: Variable Name (Continued)

Project Medal Expectation /Project Personnel Expectation	<i>sport_medal_per_person</i>	Ratio of sport medals to projected personnel for a specific sport
Gold Medal Probability	<i>gold_prob</i>	Probability of an athlete winning a gold medal
Silver Medal Probability	<i>silver_prob</i>	Probability of an athlete winning a silver medal
Bronze Medal Probability	<i>silver_prob</i>	Probability of an athlete winning a bronze medal
No Medal Probability	<i>no_medal_probe</i>	Probability of an athlete winning no medal

6 Task2:

6.1 Conclusion of Model 2

The results are shown in Figure 1, where t denotes the time in seconds, and c refers to the concentration of water in the boiler.

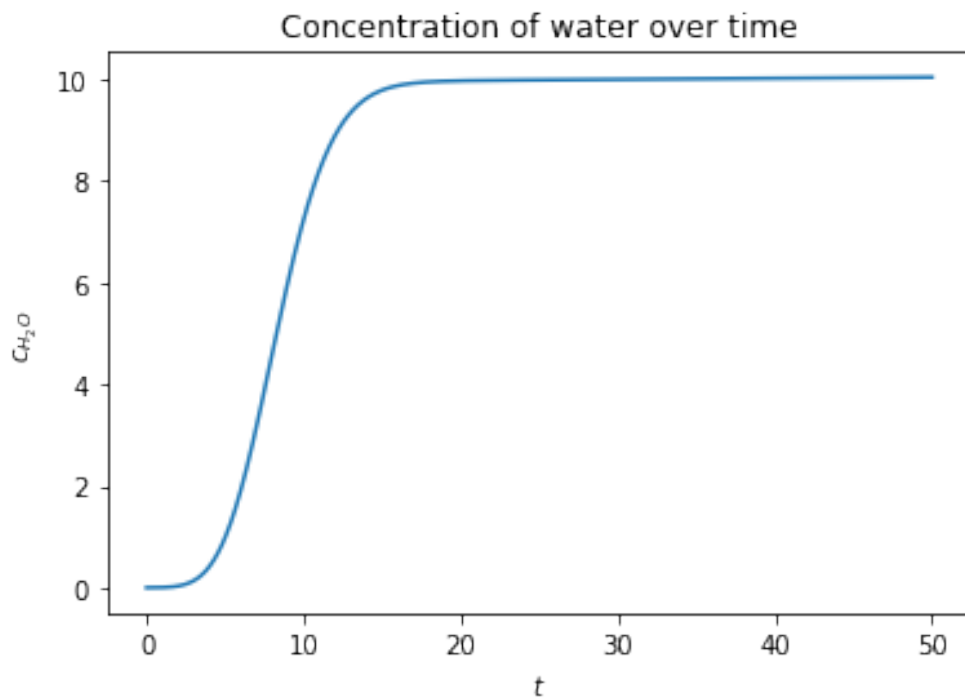


Figure 1: The result of Model 2

6.2 Commetary on Model 2

The instance of long and wide tables are shown in Table ??.

Figure 2 gives an example of subfigures. Figure 2a is on the left, and Figure 2b is on the right.

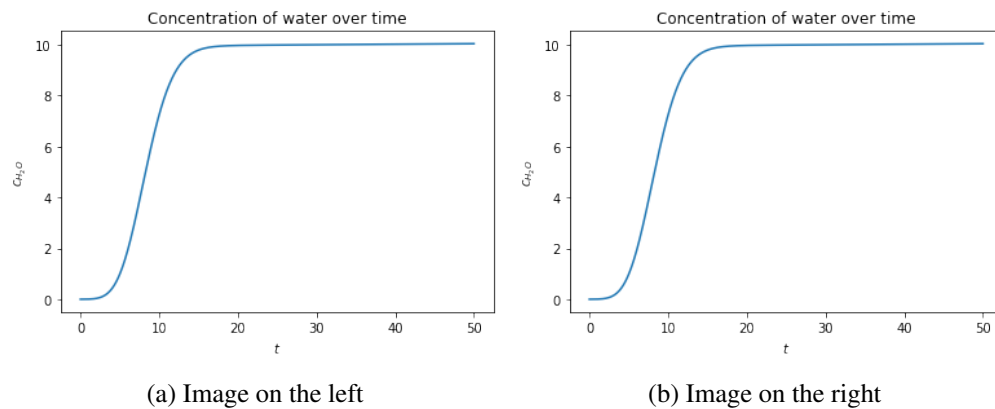


Figure 2: Two images

7 Task3

8 Task4

9 Sensitivity Analysis

10 Model Evaluation

10.1 Strengths

- First one...
- Second one ...

10.2 Weaknesses

- Only one ...

11 Conclusion

Memorandum

To: Heishan Yan

From: Team 1234567

Date: October 1st, 2019

Subject: A better choice than MS Word: \LaTeX

In the memo, we want to introduce you an alternate typesetting program to the prevailing MS Word: \LaTeX . In fact, the history of \LaTeX is even longer than that of MS Word. In 1970s, the famous computer scientist Donald Knuth first came out with a typesetting program, which named \TeX ...

Firstly, ...

Secondly, ...

Lastly, ...

According to all those mentioned above, it is really worth to have a try on \LaTeX !

References

- [1] Einstein, A., Podolsky, B., & Rosen, N. (1935). Can quantum-mechanical description of physical reality be considered complete?. *Physical review*, 47(10), 777.
- [2] *A simple, easy \LaTeX template for MCM/ICM: EasyMCM*. (2018). Retrieved December 1, 2019, from <https://www.cnblogs.com/xjtu-blacksmith/p/easymcm.html>

Appendix A: Further on L^AT_EX

To clarify the importance of using L^AT_EX in MCM or ICM, several points need to be covered, which are ...

To be more specific, ...

All in all, ...

Anyway, nobody **really** needs such appendix ...

Appendix B: Program Codes

Here are the program codes we used in our research.

test.py

```
# Python code example
for i in range(10):
    print('Hello, world!')
```

test.m

```
% MATLAB code example
for i = 1:10
    disp("hello, world!");
end
```

test.cpp

```
// C++ code example
#include <iostream>
using namespace std;

int main() {
    for (int i = 0; i < 10; i++)
        cout << "hello, world" << endl;
    return 0;
}
```