# Senior Project Report 2102499 Year 20XX

# Solar irradiance forecasting for Chulalongkorn University location using time series models

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#### **Abstract**

This template is for preparing the senior project report in English. The guideline of writing the contents can be read from the Thai template.

Keywords: solar forecasting, ARIMA models (up to five)

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- 1 Introduction
- 2 Project Overview
- 2.1 Objectives
- 2.2 Scope of Work
- 2.3 Expected Outcomes
- 3 Methodology
- 4 Results
- **5** Conclusions
- 6 Acknowledgement

(optional)

## 7 List of LaTeX usage

#### 7.1 Tables

Table 1: Example

Item	Font	Font Type	Font Size
Title	Garamond	Bold	20
Author names	Garamond	Bold	12
Author affiliation/email	Garamond	Regular	11
Abstract/Keywords	Garamond	Regular	11
Level 1 headings	Garamond	Bold	12
Level 2 headings	Garamond	Bold	11
Level 3 headings	Garamond	Regular	11
Figure/table captions	Garamond	Regular	11
Main text/References	Garamond	Regular	11

#### 7.2 Figures

#### 7.3 Equations

$$y = Cx$$

$$F(s) = \int_0^\infty e^{-st} f(t)dt \tag{1}$$

the package 'align'

$$x = 2 \tag{2}$$

$$y = 3 \tag{3}$$

$$z = x \times y$$

$$=p$$
 (4)

• To not include an equation number, use or notag

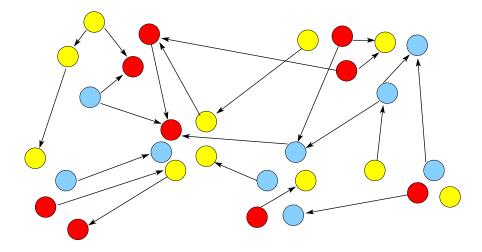


Figure 1:



Figure 2: (Source: Shutterstock.com Image by: Alex Mit)

• Cross referencing can be done using ref or eqref together with label. For example, we refer to (2) that x = 2.

the package 'eqnarray' is another environment to arrange equations into array format.

$$\dot{x} = Ax + Bu \tag{5}$$

$$y = Cx + Du (6)$$

If we want to align all equations into center use the package 'gather'.

$$y = \sum_{n=0}^{1} 000.5^n + \sin(2\pi nt) + \lim_{n \to \infty} \frac{\log n}{n}$$

$$z = \lim_{t \to \infty} e^{-st} g(t)$$
(8)

$$z = \lim_{t \to \infty} e^{-st} g(t) \tag{8}$$

#### 7.4 References

Reference formats are different from reference types. We commonly use the IEEE format, found in https://www.ieee.org/documents/ieeecitationref.pdf

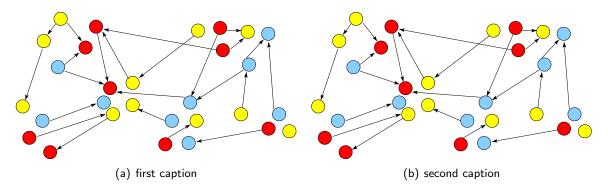


Figure 3: sugfigure

Use BibTex to generate reference list in the document. You will need a list of reference in the format of file.bib containing reference details, which can be exported easily using Google Scholar. When to refer to a paper, use cite. For example, the concept about system identification can be read from [1].

#### References

[1] T. Söderström and P. Stoica. System Identification. Prentice Hall International, London, 1989.

### 8 Appendices

- 8.1 Appendix A
- 8.2 Appendix B