TITLE
OF
THESIS

A THESIS

Submitted by

<NAME IN CAPITAL LETTERS>

in partial fulfullment of the requirements for the degree of

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SCHOOL OF ENGINEERING

Shiv Nadar University Chennai

Kalavakkam - 603 110,

Tamil Nadu, India.

¡MONTH¿ ¡YEAR¿

BONAFIDE CERTIFICATE

The research work embodied in the present Thesis entitled **"TITLE OF THESIS"** has been carried out in the <NAME OF THE SUPERVISOR'S DEPARTMENT>, Shiv Nadar University, Chennai. The work reported herein is original and does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion or to any other scholar.

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ABSTRACT

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LIST OF SYMBOLS AND ABBREVIATIONS

γ	-	Gamma
δ	-	Delta

Chapter 1

Author Instructions

1. Synopsis should be bound with black calico cloth and using flexible cover of thick white art paper.

2. The cover should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page.

3. Replace this section and the next section on LaTeXtips with the contents of your synopsis.

4. Replace the list of publications on the last page with BibTeX entries of your published work. If your paper hasn't been published, please create a bibtex entry in the .bib file following the format of other entries in the file. Use Google Scholar to extract bibtex entries you can copy and paste into the .bib file.

5. For chapter, section and subsection titles longer than the extents of the table of contents page, use square brackets and specify appropriate `\newline` commands to make sure the title stays before the PAGE NO. header in the ToC as shown here:

```
\section[This is a long title for this section
  and \newline will be divided into 3 lines in
  the \newline Table of Contents by the newline
  command.]{This is a long title for this
  section and will be divided into 3 lines in
  the Table of Contents by the newline command.}
```

6. Make sure the SYMBOLS AND ABBREVIATIONS section is sorted by the right hand size.

7. Thesis (3 copies) side pinning/stitching, covered with wrapper printed on 300 gsm white art card and outer side gloss laminated, adhesive binding. The cover should be

printed in black letters and the text for printing should be identical to what has been prescribed for the title page.

1.0.1 LaTeXtips specified by a long title that will be divided into 2 lines in the table of contents

- For each chapter, section subsection and subsubsection in the synopsis, use:

```
\chapter{NAME}, \section{NAME}, \subsection{NAME} and \subsubsect
```

- For spaces and tabs, use

```
\:, \s, \quad and \qquad
```

- For single images, you can use the begin figure and end commands. For a grid of images, you can use tabular inside the figure environment.

```
\begin{figure}
\begin{tabular}{cc}
  \includegraphics[width=65mm]{snuc_logo} &
  \includegraphics[width=65mm]{snuc_logo} \\
(a) first & (b) second \\[6pt]
 \includegraphics[width=65mm]{snuc_logo} &
 \includegraphics[width=65mm]{snuc_logo} \\
(c) third & (d) fourth \\[6pt]
\multicolumn{2}{c}{\includegraphics[width=65mm]{snuc_logo} }\\
\multicolumn{2}{c}{(e) fifth}
\end{tabular}
\caption{caption}
\end{figure}
```

- To create publication-ready images, you can use IPE on Linux

```
sudo apt-get install ipe
```

- For multi-line equations, use the equation environment and split command inside it.

```
\begin{equation}
    \begin{split}
        x^2 + y^2 &= 1 \\
        a &= b
    \end{split}
\end{equation}
```

- For references, use the following commands.

```
\cite{BIB_ID} command in the middle of the text
\bibliographystyle{apalike} for references section
\bibliography{ref} to include the .bib file
```

Here are some sample citations for easier re-use of this document - Le Cun and Bengio (1994) Niu and Suen (2012), Chychkarov et al. (2021), Cirstea (2018).

1.1 Images and Tables section

Figure 1.1: Caption 1

Figure 1.2: Caption 2

Figure 1.3: Caption 3

h2	h1
4	3
4	3

Table 1.1: Caption 1

h6	h5
8	7
8	7

Table 1.2: Caption 2

Bibliography

Chychkarov, Y., Serhiienko, A., Syrmamiikh, I., and Kargin, A. (2021). Handwritten digits recognition using svm, knn, rf and deep learning neural networks. *CMIS*, 2864:496–509.

Cirstea, B.-I. (2018). *Contributions to handwriting recognition using deep neural networks and quantum computing*. PhD thesis, Télécom ParisTech.

Le Cun, Y. and Bengio, Y. (1994). Word-level training of a handwritten word recognizer based on convolutional neural networks. In *Proceedings of the 12th IAPR International Conference on Pattern Recognition, vol. 3-Conference C: Signal Processing (Cat. No. 94CH3440-5)*, volume 2, pages 88–92. IEEE.

Niu, X.-X. and Suen, C. Y. (2012). A novel hybrid cnn–svm classifier for recognizing handwritten digits. *Pattern recognition*, 45(4):1318–1325.

List of Publications

1. Le Cun, Y. and Bengio, Y. (1994). Word-level training of a handwritten word recognizer based on convolutional neural networks. In *Proceedings of the 12th IAPR International Conference on Pattern Recognition, vol. 3-Conference C: Signal Processing (Cat. No. 94CH3440-5)*, volume 2, pages 88–92. IEEE

    - Status: Published / Accepted for publication
    - Journal Impact Factor: <NUM>

2. Cirstea, B.-I. (2018). *Contributions to handwriting recognition using deep neural networks and quantum computing*. PhD thesis, Télécom ParisTech

    - Status: Published / Accepted for publication
    - Journal Impact Factor: <NUM>

3. Chychkarov, Y., Serhiienko, A., Syrmamiikh, I., and Kargin, A. (2021). Handwritten digits recognition using svm, knn, rf and deep learning neural networks. *CMIS*, 2864:496–509

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