

————**Insert Title Here**————

A project report submitted in partial fulfillment of the requirements
for the award of the degree of

B.E. in
Information Technology

By

Name 1 (Roll 1)

Name 2 (Roll 2)

Under the supervision of

————**Name of supervisor**————

Information Technology (IT)

Netaji Subhas Institute of Technology, Delhi



DIVISION OF INFORMATION TECHNOLOGY
NETAJI SUBHAS INSTITUTE OF TECHNOLOGY
UNIVERSITY OF DELHI
DELHI-110078

DECEMBER 2020

CERTIFICATE

This is to certify that the project titled **——Insert Title Here——** is a bonafide record of the work done by

Name 1 (Roll 1)

Name 2 (Roll 2)

under my supervision and guidance in partial fulfillment of the requirements for the award of the degree of **Bachelor of Engineering in Information Technology** of the **Netaji Subhas Institute of Technology, University of Delhi, DELHI-110078**, during the year 2020-2021.

Their work is genuine and has not been submitted for the award of any other degree to the best of my knowledge.

DATE:

Prof Name

Designation

Division of Information Technology

Netaji Subhas Institute of Technology

University of Delhi

DECLARATION

This is to certify that the work which is being hereby presented by us in this project titled “——**Insert Title Here**——” in partial fulfilment of the award of the Bachelor of Engineering submitted at the Department of Information Technology, Netaji Subhas Institute of Technology, University of Delhi, New Delhi, is a genuine account of our work carried out during the period from August 2020 to December 2021 under the guidance of —— prof name——, Department of Information Technology, Netaji Subhas Institute of Technology, University of Delhi, New Delhi.

The matter embodied in the project report to the best of our knowledge has not been submitted for the award of any other degree elsewhere.

DATE:

Name 1

(Roll 1)

Name 2

(Roll 2)

ACKNOWLEDGEMENT

We would like to take this opportunity to acknowledge the support of all those without whom the completion of this project in fruition would not be possible.

—— write more here ——

TABLE OF CONTENTS

Title	Page No.
CERTIFICATE	1
DECLARATION	2
ACKNOWLEDGEMENT	3
TABLE OF CONTENTS	4
LIST OF TABLES	5
LIST OF FIGURES	6
1 Introduction	7
1.1 Section 1 of Intro	7
2 Motivation	8
3 Literature Review	9
References	9
Appendices	11
A Code Attachments	12

List of Tables

List of Figures

Chapter 1

Introduction

type Introduction here

1.1 Section 1 of Intro

Cite like this [1]

Chapter 2

Motivation

Chapter 3

Literature Review

—insert lit review—

Bibliography

- [1] A. Moravejosharieh, K. Ahmadi, and S. Ahmad, “A fuzzy logic approach to increase quality of service in software defined networking,” in *2018 International Conference on Advances in Computing, Communication Control and Networking (ICACCCN)*, 2018, pp. 68–73.

Appendices

Appendix A

Code Attachments

A.1 Lorem Ipsum

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

```
1 def get_parameters(data, chunk_size=410):
2     #Store the activity label to add later
3     activity = data['Activity']
4     '''
5     Define a dictionary of functions. Sets of readings will be
6     aggregated as per these functions
7     '''
8     func_dict = {
9         'min': np.min,
10        'max': np.max,
11        'diff': lambda x: np.max(x) - np.min(x),
12        'std': np.std,
13        'iqr': stats.iqr,
14        'rms': lambda x: np.sqrt(np.mean(np.square(x))),
15        'mad': lambda x: x.mad(),
16        'mediad': mediad
17    }
18    aggregations = {
19        'X': func_dict,
20        'Y': func_dict,
21        'Z': func_dict
22    }
23    data_groups = []
24    '''
25    Transform the dataset into rolling windows of 410 readings each
    and store them in a Pandas data group.
    '''
```

```

26 for i in range(int(data.shape[0]/(chunk_size/2)) - 1):
27     temp = data.iloc[int(i*(chunk_size/2)):int((i+2)*(chunk_size/2))]
28     temp['k'] = i
29     data_groups.append(temp)
30 data_groups = pd.concat(data_groups).groupby('k', as_index=False)
31 #Run the aggregations on all data groups
32 stats_data = data_groups.agg(aggregations)
33 stats_data.columns = [''.join(col).strip() for col in stats_data.
34     columns.values]
35 activity = activity.reset_index(drop=True)
36 #Add activity label
37 stats_data = pd.concat([stats_data, activity[:len(stats_data)]],
38     axis=1)
39 del stats_data['k']
40 return stats_data

```