

Constructing an Associative Memory System Using Spiking Neural Network

A Seminar Report

submitted by

SANKAR VINAYAK E P

PKD19CS046

to

the APJ Abdul Kalam Technological University

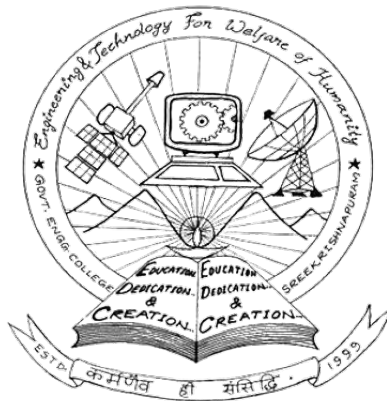
in partial fulfillment of requirements for the award of degree

of

Bachelor of Technology

in

Computer Science and Engineering



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GOVERNMENT ENGINEERING COLLEGE PALAKKAD

SREEKRISHNAPURAM 678 633

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**DEPT. OF COMPUTER SCIENCE ENGINEERING GOVERNMENT
ENGINEERING COLLEGE PALAKKAD**

2022 - 23



CERTIFICATE

This is to certify that the report entitled **Constructing an Associative Memory System Using Spiking Neural Network** submitted by **SANKAR VINAYAK E P** (PKD19CS046), to the APJ Abdul Kalam Technological University in partial fulfillment of the B.Tech. degree in Computer Science and Engineering is a bonafide record of the seminar work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

Liji L Dominic
(Seminar Guide)
Assistant Professor
Dept.of CSE
GOVERNMENT ENGINEERING
COLLEGE PALAKKAD

Dr. Swaraj K P
(Seminar Coordinator)
Associate Professor
Dept.of CSE
GOVERNMENT ENGINEERING
COLLEGE PALAKKAD

Dr. Sabitha S
Professor and Head
Dept.of CSE
GOVERNMENT ENGINEERING COLLEGE
PALAKKAD

DECLARATION

I SANKAR VINAYAK E P hereby declare that the seminar report **Constructing an Associative Memory System Using Spiking Neural Network**, submitted for partial fulfillment of the requirements for the award of degree of Bachelor of Technology of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by me under supervision of Liji L Dominic

This submission represents my ideas in my own words and where ideas or words of others have been included, I have adequately and accurately cited and referenced the original sources.

I also declare that I have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University.

Sreekrishnapuram

15-12-2022

SANKAR VINAYAK E P

Abstract

This document contains essential templates required to write technical reports using \LaTeX . This template may be used for the preparation of B.Tech seminar reports of APJ Abdul Kalam Technological University, Kerala. Also minimum working examples to create equations, include figure, include table, table of contents symbols list and bibliographic citation in a \LaTeX document are provided.

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JIM

Acknowledgement

I take this opportunity to express my deepest sense of gratitude and sincere thanks to everyone who helped me to complete this work successfully. I express my sincere thanks to **Dr. Sabitha S**, Head of Department, Computer Science and Engineering, College of Engineering Sreekrishnapuram for providing me with all the necessary facilities and support.

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SANKAR VINAYAK E P

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3.1 test table 5

List of Symbols

Ω Unit of Resistance

ε' Real part of dielectric constant

c Speed of light

λ Wavelength

δ Delta

Chapter 1

Introduction

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Chapter 2

Literature Review

Technical writing is writing or drafting technical communication used in technical and occupational fields [1], such as computer hardware and software [2], engineering, chemistry, aeronautics, robotics, finance [3], medical, consumer electronics, biotechnology, and forestry. Technical writing encompasses the largest sub-field in technical communication. See figure 2.1 that shows the autonomous systems in Internet.

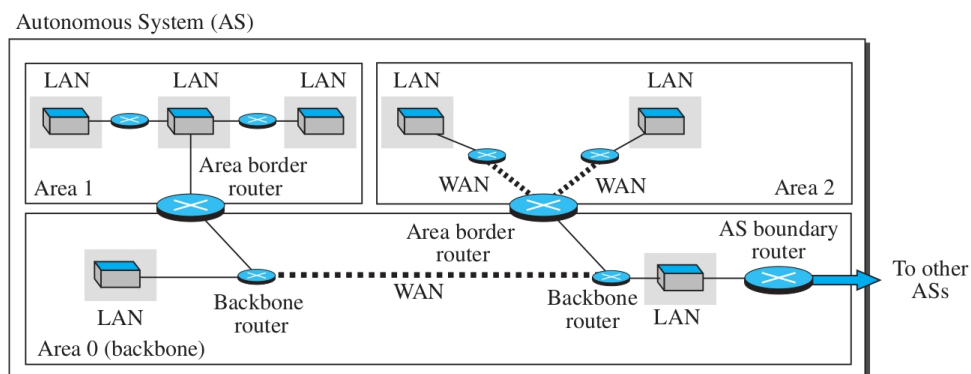


Figure 2.1: Autonomous System Hierarchy

2.1 section1

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nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

2.1.1 title 2

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The system is described by the equation 2.1 below. Here y is the ordinate and x is the abscissa, m is the slope and c a constant.

$$y = mx + c \quad (2.1)$$

Page centered and unnumbered multiple equations. The * symbol suppresses equation numbering.

$$2x - 5y = 8$$

$$3x + 9y = -12$$

Side by side figures can be created using this environment. See fig 2.2 below.

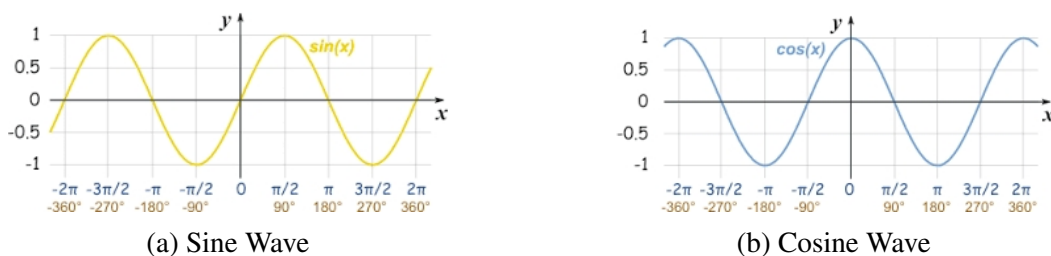


Figure 2.2: The Sine and Cosine waves

Chapter 3

Results

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quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu
ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis,
fermentum vel, eleifend faucibus, vehicula eu, lacus.

Table 3.1: test table

Sl. No	Item 1	Itm 2
1	37	45
2	42	23
3	47	1
4	52	-21
5	57	-43
6	62	-65
7	67	-87
8	72	-109
9	77	-131
10	82	-153

Chapter 4

Conclusion

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References

- [1] HU, Yun Chao, et al., *Mobile edge computing?A key technology towards 5G*, ETSI white paper, 2015, vol. 11, no 11, p. 1-16.
- [2] @online Raspberry pi, <https://www.raspberrypi.org/> Online; accessed 10-June-2019
- [3] HU, Yun Chao, et al., *Mobile edge computing?A key technology towards 5G*, ETSI white paper, 2015, vol. 11, no 11, p. 1-16.