

Report
On
A Summer Industry Internship – I
ARP SPOOFING DETECTION AND PREVENTION
(ENCRYPTION, VPN'S)

During
II Year II Semester Summer
Submitted to
The Department of CSE-Cyber Security
In partial fulfilment of the academic requirements of
Jawaharlal Nehru Technological University

For
The award of the degree of
Bachelor of Technology

In
CSE-Cyber Security

By
M.TARAKA RAJASEKHAR 21311A6202

Mrs V.GEETA
Asst. Prof. and Internship Coordinator
Dept. of CSE- Cyber Security



Sreenidhi Institute of Science and Technology

Yamnapet, Ghatkesar, R.R. District, Hyderabad - 501301

Affiliated to
Jawaharlal Nehru Technology University
Hyderabad - 500085



Department of CSE- Cyber Security

CERTIFICATE

This is to certify that this Summer Industry Internship – I Report on Internship carried out in “CYBER-SECURITY”, submitted by M.TARAKARAJASEKHAR(21311A6202) in the year 2023-24 in partial fulfillment of the academic requirements of Jawaharlal Nehru Technological University for the award of the degree of Bachelor of Technology in CSE- Cyber Security, is a bonafide work in summer industry internship that has been carried out after II year B.Tech. CSE(CS) II semester, will be evaluated in III year B.Tech. CSE(CS) I semester. This report has not been submitted to any other institute or university for the award of any degree.

Mrs.V.Geeta
Asst.Prof. and Internship Coordinator
Department of CSE-Cyber Security
SNIST

Dr . K. Shirisha
Professor and Head,
Department of CSE-Cyber Security
SNIST

External Examiner

Date:-

Certificates Received in lieu of internship completion



Certificate of Completion

MAMILLAPALLI TARA KA RAJASEKHAR

Has Successfully Completed

Fundamentals of Cloud Security

Date

09/26/2023



Michael Kelley
SVP, Worldwide Shared Services



Certificate of Completion

MAMILLAPALLI TARA KA RAJASEKHAR

Has Successfully Completed

The Fundamentals of SOC (Security Operations Center)

Date

09/27/2023



Michael Kelley
SVP, Worldwide Shared Services





अखिल भारतीय तकनीकी शिक्षा परिषद्
All India Council for Technical Education



Certificate of Virtual Internship

This is to certify that

MAMILLAPALLI TARAKA RAJASEKHAR

Sreenidhi Institute of Science & Technology

has successfully completed 10 weeks

Cybersecurity Virtual Internship

During September - November 2023

Supported By  **paloalto**
NETWORKS

Saravanan Rajagopal
Training Partner Manager, APAC
Palo Alto Networks

Shri Buddha Chandrasekhar
Chief Coordinating Officer (CCO)
NEAT Cell, AICTE

Dr. Satya Ranjan Biswal
Chief Technology Officer (CTO)
EduSkills



Certificate ID :2eca0f13a55da989f4b170b5aae8eb41
Student ID :STU649efe95c8c0e1688141461

www.eduskillsfoundation.org

DECLARATION

I, **MAMILLAPALLI TARAKA RAJASEKHAR (21311A6202)** student of **SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR**, studying IIIrd year Ist semester, **CSE- CYBER SECURITY** solemnly declare that the Summer Industry Internship-I Report, is submitted to **SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY** for partial fulfillment for the award of degree of Bachelor of Technology in **CSE-CYBER SECURITY**.

It is declared to the best of my knowledge that the work reported does not form part of any dissertation submitted to any other University or Institute for award of any degree

M.T.RAJASEKHAR

21311A6202

ACKNOWLEDGEMENT

I would like to express my gratitude to all the people behind the screen who helped me to transform an idea into a real application.

I would like to thank my Project coordinator **Mrs.V.GEETA**, for her technical guidance, constant encouragement and support in carrying out my project at college.

I profoundly thank **Dr. K. Shirisha**, Head of the Department of CSE-Cyber Security who has been an excellent guide and also a great source of inspiration to my work.

I would like to express my heart-felt gratitude to my parents without whom I would not have been privileged to achieve and fulfill my dreams. I am grateful to our principal, **Dr. T. Ch. Siva Reddy**, who most ably run the institution and has had the major hand in enabling me to do my project.

The satisfaction and euphoria that accompany the successful completion of the task would be great but incomplete without the mention of the people who made it possible with their constant guidance and encouragement crowns all the efforts with success. In this context, I would like thank all the other staff members, both teaching and non-teaching, who have extended their timely help and eased my task.

M.T.RAJASEKHAR-21311A6202

INDEX

Contents	Page No.
1. INTRODUCTION	01-04
1.1 About the Internship	01
1.2 Plan of Training Program	02
1.3 Scope	03
1.4 Technology Learnt	04
2. Problem Statement and Solution	05-33
2.1 Abstract	05
2.2 Introduction	06
2.3 Analysis and Designs Arp Spoofing (Encryption,VPN's)	07-26
2.4 Proposed Solution	27-33
3. Internship Feedback	34-36
3.1 About Company	34
3.2 Experience in Internship	35
3.3 Challenges Faced	36
4. References and Bibliography	37
5. Abstract	38
6. a. Domain of Training carried out in Internship	39
b. Correlation between the Summer Industry Internship-I and the Program Outcomes (POs), Program Specific Outcomes (PSOs)	