

SRI SIDDHARTHA ACADEMY OF HIGHER EDUCATION

(Declared as Deemed to be University Under Section 3 of the UGC Act, 1956

Approved by AICTE, Accredited by NBA, NAAC 'A+' Grade)

AGALKOTE, TUMAKURU – 572107

KARNATAKA



Project Report

On

“Generation and Integration of Synthetic Data To Develop AI models”

Submitted in fulfillment of requirements for the award of degree

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

Submitted by

ESHWAR G	(21CS029)
PAVAMANA S	(21CS071)
ULLAS DG	(21CS106)
YASH K	(21CS120)

Under the guidance of

Mrs. SINDHU TN

Asst. Professor,
Dept. of CSE SSIT,
Tumakuru – 572105



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY

(A Constituent College of Sri Siddhartha Academy of Higher Education,

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MARALUR, TUMAKURU-572105

2024-2025

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MARALUR, TUMAKURU – 572105, KARNATAKA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



CERTIFICATE

This is to certify that the project entitled ***“GENERATION AND INTEGRATION OF SYNTHETIC DATA TO DEVELOP AI MODELS”*** is a bonafide work carried out by ***ESHWAR G, PAVAMANA S, ULLAS DG and YASH K*** in fulfillment for the award of degree of ***Bachelor of Engineering in Computer Science and Engineering*** during the academic year ***2024-25***.

It is certified that all the corrections/suggestions indicated for internal assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the degree of Bachelor of Engineering in Computer Science and Engineering.

Signature of the guide

Mrs. Sindhu TN

Assistant Professor, Dept. of CSE
SSIT, Tumakuru

Signature of the HOD

Dr. Raviram V

Professor & Head, Dept of CSE
SSIT, Tumakuru

Signature of the Principal

Dr. M.S.Raviprakash

Principal,
SSIT, Tumakuru

Project associates

- 1) **ESHWAR G**
- 2) **PAVAMANA S**
- 3) **ULLAS DG**
- 4) **YASH K**

USN No.

- (21CS029)
- (21CS071)
- (21CS106)
- (21CS120)

Examiners

1. _____
2. _____

Signature with Date

- _____
- _____

ACKNOWLEDGEMENT

At the outset we express our most sincere grateful thanks to holy sanctum of “**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY**”, the temple of learning, for giving us an opportunity to pursue the degree course in Computer Science and Engineering thus help shaping our career.

We wish to express our sincere gratitude to **Dr. M. S. RAVIPRAKASHA** Principal, Sri Siddhartha Institute of Technology, for providing us an excellent academic environment, which has nurtured our practical skills, and for kindly obliging our requests and providing timely assistance.

We are highly grateful to **Dr. RAVIRAM V**, Professor and Head of the Department of Computer Science and Engineering, for patronizing us throughout the project and for his encouragement and moral support.

We also wish to express our deep sense of gratitude to our project guide **Mrs. SINDHU TN**, Asst. Professor, Department of Computer Science and Engineering, for her valuable suggestions, guidance, moral support and encouragement in the completion of this project successfully. We have been fortunate for having her precious help.

Finally, we express our gratitude to all the teaching and non-teaching staff of the **Computer Science and Engineering Department** for their timely support and suggestions.

We are also thankful to our parents for their moral support and constant guidance made our efforts fruitful. Last but not the least, our friends, without their constructive criticisms and suggestions, we wouldn't have been able to complete successfully.

PROJECT ASSOCIATES

Eshwar G	(21CS029)
Pavamana S	(21CS071)
Ullas DG	(21CS106)
Yash K	(21CS120)

DECLARATION

We here by declare that this project work entitled ***“GENERATION AND INTEGRATION OF SYNTHETIC DATA TO DEVELOP AI MODELS”*** is an original and bonafide work carried out by us at **SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY**, Tumakuru, in partial fulfillment of **BACHELOR OF ENGINEERING** in **Computer Science and Engineering**.

We also declare that, to the best of our knowledge and belief, The work reported here in 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 by any student.

Date:

Place:

Eshwar G (21CS029)

Pavamana S (21CS071)

Ullas DG (21CS106)

Yash K (21CS120)



Kushal N(21CS404)



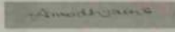
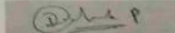
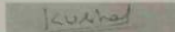
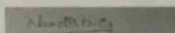
Nandish Mallappa Gali (21CS404)

KSCST DECLARATION:

DECLARATION
(From Project Students)
(To scan this page and enclose in the project proposal)

We, the project team hereby declare that the details enclosed in the project proposal (Title of the Project **DESIGN AND DEVELOPMENT OF DEFENDX FIREWALL USING AI&ML TECHNIQUES**. Branch: **Computer Science and Engineering**. College: **Sri Siddhartha Institute of Technology** are true and correct to the best of our knowledge and belief and we undertake to inform KSCST of any changes therein in the project title, students name will be intimated immediately through project guide. In case any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it. We hereby authorize sharing of the project information with this project proposal with the Karnataka State Council for Science and Technology, Bengaluru.

We are aware that the project team must exhibit / demonstrate the project in the nodal centre and interact regarding project with the experts and to exhibit the project in the State Level Seminar and Exhibition (if selected). If the student team fails to attend the evaluation in nodal center or fails to attend the State Level Seminar and Exhibition, the supported project amount will be returned to KSCST. We also hereby, enclose the endorsement form to KSCST, Bengaluru.

Name of the students with USN No.	Signature with date
AMODH JAIN S (20CS008)	 19-02-2024
DEEPAK P (20CS028)	 19-02-2024
KUSHAL N (21CS404)	 19-02-2024
NANDISH MALLAPPA GALLI(21CS406)	 19-02-2024

Roopa w.b. 19/02/2024

(Name & Signature of Project Guide with Seal)
Email id: roopank@ssit.edu.in
Contact No.: 9900243628

3/6 20.2.2024

(Name & Signature of HOD with Seal)
Email id: renukalathas@ssit.edu.in
Contact No.: 9448432653

KSCST: Student Project Programme; 47th series: 2023-2024

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KSCST ENDOSEMENT:

ENDORSEMENT

(From College, endorsement to be taken in the institution / Department Letter head)
(To scan this page and enclose in the project proposal)

This is to certify that 1) Mr. Amod Jain S 2) Mr. Deepak P 3) Mr. Kushal N 4) Mr. Nandish Mallappa Galli are bonafide student(s) of Department of Computer Science and Engineering in the degree program of our institution. If the project proposal submitted by these students under the 47th series of Student Project Programme is selected by KSCST, we will provide the requisite laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps to see that the project team will exhibit / demonstrate their project in the nodal centre and in the State Level Seminar and Exhibition (if selected). If the student team fails to send the completed project report or fails to attend the evaluation in nodal centre or fails to attend the State Level Seminar and Exhibition, the supported project amount will be returned to KSCST.

<p><i>Roopank S.B. 19/02/2024</i></p> <p>(Name & Signature of Project Guide with Seal)</p> <p>Email id: roopank@ssit.edu.in</p> <p>Contact No.: 9900243628</p>	<p><i>R.H. 20.2.24</i></p> <p>(Signature of HOD with Seal)</p> <p>Dr. RENUKALATHA S. Dean (Academic)</p> <p>Sri Siddhartha Institute of Technology, Tumkur - 572105</p> <p>Email id: renukalatha@ssit.edu.in</p> <p>Contact No.: 9448432653</p>	<p><i>R.H. 20.2.24</i></p> <p>(Signature of the Principal with Seal)</p> <p>Principal</p> <p>Sri Siddhartha Institute of Technology, Tumkur - 572105</p> <p>Email id: principal@ssit.edu.in</p> <p>Contact No.: 9901922149</p>
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