

FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

AI BASED STREAMING ANALYTICS TOOLKIT FOR VIDEO PROCESSING IN ITS

A Project Submitted to Madurai Kamaraj University in partial fulfillment of the
requirements for the award of degree of

M.Sc. (INFORMATION TECHNOLOGY)

Submitted By

2021MSIT02 - M.BHUVANESHWARI

Under The Guidance Of

Mrs I.Razul Beevi, MCA, SET,

Assistant Professor

Department Of Information Technology



FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited with 'A++' Grade by NAAC (4th Cycle)

Maryland, Madurai-625018

APRIL- 2023



Scanned with OKEN Scanner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

DEPARTMENT OF INFORMATION TECHNOLOGY

BONAFIDE CERTIFICATE

This is to certify that the Project Report entitled "AI based streaming analytics toolkit for video processing in ITS," is the bonafide record work done by
M.BHUVANESHWARI (2021MSIT02) in partial fulfillment for the award of the degree
M.Sc. (INFORMATION TECHNOLOGY), Fatima College, Madurai.

Submitted for the viva-voce Examination held on 11-04-2023


Internal Examiner


Head of the Department


External Examiner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

T. Mayilvahanan
E (Struct), A.I.I. Arch., Ph.D (Transport)
Under Chairman & Managing Director



TO WHOMSOEVER IT MAY CONCERN

This is to confirm that **Ms. BHUVANESHWARI M (REG.NO 2021MSIT02)**, Pursuing final year **MSC[IT]**, **FATIMA COLLEGE, MARY LAND, MADURAI** has been selected to undergo her project work **"AI BASED STREAMING ANALYTICS TOOLKIT FOR VIDEO PROCESSING IN ITS (Intelligent Transport System)"** using **Deep Stream** at **COS AI, Madurai** from Dec 2022.

With Best Wishes,

(Dr.T.Mayilvahanan)
Managing Director - COS AI



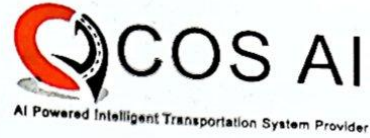


FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

T. Mayilvahanan
E (Struct.), A.I.I.Arch., Ph.D (Transport)
Under Chairman & Managing Director



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. BHUVANESHWARI M** (REG.NO 2021MSIT02), a student of MSc(IT), Final year, Fatima college (Autonomous), Madurai, Tamil Nadu has successfully completed her major project, duration from Dec 2022 to Mar 2023 entitled "AI BASED STREAMING ANALYTICS TOOLKIT FOR VIDEO PROCESSING IN ITS (Intelligent Transport System) USING DEEP STREAM" at COS AI Madurai. During this period of her major project with us, she was punctual and inquisitive.

We wish her every success in life.

COS AI – Madurai.

(Dr.T.Mayilvahanan)

Authorised Signatory



Head Office:
1/1, Ground Floor, Kamaraj Nagar 4th St,
Madurai - 625 002, TN
Ph: 94430 63037
Email: info@cosai.com

+91 94430 63037

Branch Office : Bangalore | Chennai

Scanned with OKEN Scanner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

Edge-AI-Based Automated Number Plate Recognition System Using Deep Learning

A Project Submitted to Madurai Kamaraj University in partial fulfillment of
the requirements for the award of degree of

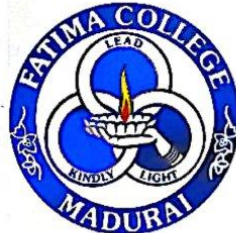
M.Sc. (INFORMATION TECHNOLOGY)

Submitted By

2021MSIT03 – R.JEYA BRINDHA

Under The Guidance Of

Mrs. I. Razul Beevi, MCA,SET,
Assistant professor
Department Of Information Technology



FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited with 'A++' Grade by NAAC (4th Cycle)

Maryland, Madurai-625018

APRIL - 2023

 Scanned with OKEN Scanner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

DEPARTMENT OF INFORMATION TECHNOLOGY

BONAFIDE CERTIFICATE

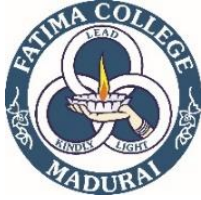
This is to certify that the Summer Internship Report entitled “ **Edge-AI-based automated number plate recognition using deep learning.**” is the bonafide record work done by **R.JEYA BRINDHA (2021MSIT03)** in partial fulfillment for the award of the degree **M.Sc. (INFORMATION TECHNOLOGY)**, Fatima College, Madurai.

Submitted for the viva-voce Examination held on 11-04-2023


Internal Examiner


Head of the Department

 11/4/2023
External Examiner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

Dr. T. Mayilvahanan
(Struct.), A.I.T. Arch., Ph.D (Transport)
Under Chairman & Managing Director



TO WHOMSOEVER IT MAY CONCERN

This is to confirm that **Ms. JEYA BRINDHA R (REG.NO 2021MSIT03)**, Pursuing final year **MSC[IT]**, **FATIMA COLLEGE, MARY LAND, MADURAI** has been selected to undergo her project work **"AI-BASED REAL-TIME AUTOMATED NUMBER PLATE RECOGNITION SYSTEM"** using **Deep Learning** at **COS AI, Madurai** from Dec 2022.

With Best Wishes,

(Dr.T.Mayilvahanan)
Managing Director - COS AI



Head Quarters:
6/13, Ground Floor, Kamaraj Nagar 4th St,
Kodumam, Madurai - 625 002. TN
2-3500776
cmd@gmail.com
www.cosai.in

☎ +91 94430 63037

Branch Office : Bangalore | Chennai

Scanned with OKEN Scanner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

Dr. T. Mayilvahanan
(Struct.), A.I.I. Arch., Ph.D (Transport)
Under Chairman & Managing Director



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. JEYA BRINDHA R** (REG.NO 2021MSIT03), a student of MSc[IT], Final year, Fatima college (Autonomous), Madurai, Tamil Nadu has successfully completed her major project, duration from Dec 2022 to Mar 2023 entitled "AI-BASED REAL-TIME AUTOMATED NUMBER PLATE RECOGNITION SYSTEM USING DEEP LEARNING" at COS AI Madurai. During this period of her major project with us, she was punctual and inquisitive.

We wish her every success in life.

COS AI – Madurai.

(Dr.T.Mayilvahanan)

Authorised Signatory



Head Quarters:
COS AI, 4th and 5th Floor, Kamaraj Nagar 4th St,
Madurai, Madurai - 625 002, TN
82-8500776
cosai@gmail.com
www.cosai.in

© +91 94430 63037

Branch Office : Bangalore | Chennai

Scanned with OKEN Scanner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

AI BASED AUTOMATED PARKING MANAGEMENT SYSTEM FOR MULTIPLEX MALL

Submitted in partial fulfillment of the requirements for the award of

Degree of

M.Sc. (INFORMATION TECHNOLOGY)

Of Madurai Kamaraj University

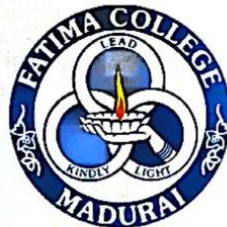
Submitted By

2021MSIT04 - A.KRISHNAVENI

Under The Guidance Of

Mrs I.RAZUL BEEVI, MCA, SET,

Assistant Professor of Information Technology



DEPARTMENT OF INFORMATION TECHNOLOGY

FATIMA COLLEGE (AUTONOMOUS)

MADURAI

APRIL 2023



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu


DEPARTMENT OF INFORMATION TECHNOLOGY

BONAFIDE CERTIFICATE

This is to certify that the Project Report entitled "AI BASED AUTOMATED PARKING MANAGEMENT SYSTEM FOR MULTIPLEX MALL" is the bonafide record work done by, A.KRISHNAVENI (2021MSIT04) in partial fulfillment for the award of the degree M.Sc. (INFORMATION TECHNOLOGY), Fatima College, and Madurai.

Submitted for the viva-voce Examination held on 11-04-2023


Internal Examiner


Head of the Department


External Examiner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

Mayilvahanan

Struct), A.I.I.Arch, Ph.D (Transport)
der Chairman & Managing Director



TO WHOMSOEVER IT MAY CONCERN

This is to confirm that Ms. A.KRISHNAVENI (REG.NO 2021MSIT04), Pursuing final year MSC[IT], FATIMA COLLEGE, MARY LAND, MADURAI has been selected to undergo her project work "AI BASED AUTOMATED PARKING MANAGEMENT SYSTEM FOR MULTIPLEX MALL" using Django Framework at COS AI, Madurai from Dec 2022.

With Best Wishes,

(Dr.T.Mayilvahanan)
Managing Director - COS AI

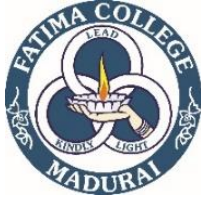


Quarters:
J.S. Ground Floor, Kamaraj Nagar 4th St,
Madurai - 625 002, TN
93900776
md@gmail.com

+91 94430 63037

Branch Office : Bangalore | Chennai

Scanned with OKEN Scanner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

Dr. T. Mayilvahanan
(Struct), A.I.T Arch., Ph.D (Transport)
Under Chairman & Managing Director



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. A.KRISHNAVENI** (REG.NO 2021MSIT04), a student of MSc[IT], Final year, Fatima college (Autonomous), Madurai, Tamil Nadu has successfully completed her major project, duration from Dec 2022 to Mar 2023 entitled "AI BASED AUTOMATED PARKING MANAGEMENT SYSTEM FOR MULTIPLEX MALL USING DJANGO FRAMEWORK" at COS AI Madurai. During this period of her major project with us, she was punctual and inquisitive.

We wish her every success in life.

COS AI – Madurai.

(Dr.T.Mayilvahanan)

Authorised Signatory



Head Quarters:
6/13, Ground Floor, Kamaraj Nagar 4th St,
Tirukulam, Madurai - 625 002, TN
92-3500776
tcmd@gmail.com
www.cosai.in

+91 94430 63037

Branch Office : Bangalore | Chennai

Scanned with OKEN Scanner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

IMAGE ANNOTATION TOOL USING DEEP LEARNING

A Project Submitted to Madurai Kamaraj University in partial fulfillment of the
requirements for the award of degree of

M.Sc. (INFORMATION TECHNOLOGY)

Submitted By

2021MSIT05 - S.PRIYANKA

Under The Guidance Of

Mrs.L.Razul Beevi MCA,SET,

Assistant Professor

Department Of Information Technology

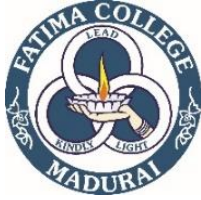


FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited with 'A++' Grade by NAAC (4th Cycle)

Maryland, Madurai-625018

APRIL - 2023



FATIMA COLLEGE

(Autonomous)

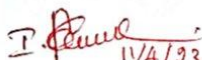
Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

DEPARTMENT OF INFORMATION TECHNOLOGY

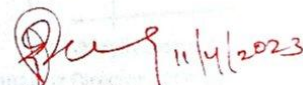
BONAFIDE CERTIFICATE

This is to certify that the Project Report entitled "IMAGE ANNOTATION TOOL USING DEEP LEARNING" is the bonafide record work done by, S.PRIYANKA (2021MSIT05) in partial fulfillment for the award of the degree M.Sc (INFORMATION TECHNOLOGY), Fatima College, Madurai.

Submitted for the viva-voce Examination held on 11-04-2023


11/4/23
Internal Examiner


Head of the Department


11/4/2023
External Examiner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

Mayilvahanan

(M.Tech. in Transport), A.I.I Arch., Ph.D (Transport)

Chairman & Managing Director



TO WHOMSOEVER IT MAY CONCERN

This is to confirm that **Ms. S.PRIYANKA (REG.NO 2021MSIT05)**, Pursuing final year MSC[IT], FATIMA COLLEGE, MARY LAND, MADURAI has been selected to undergo her project work "IMAGE ANNOTATION TOOL" using Deep Learning at COS AI, Madurai from Dec 2022.

With Best Wishes,



(Dr.T.Mayilvahanan)
Managing Director - COS AI

Quarters:
13, Ground Floor, Kamaraj Nagar 4th St,
Madurai, Madurai - 625 002, TN
93500776
mad@cosai.com
cosai.in

+91 94430 63037

Branch Office : Bangalore | Chennai



Scanned with OKEN Scanner



FATIMA COLLEGE

(Autonomous)

Affiliated to Madurai Kamaraj University
Re-Accredited with 'A++' by NAAC (Cycle - IV)
Mary Land, Madurai - 625018, Tamil Nadu

Mayilvahanan
(A.I.T. Arch., Ph.D (Transport))
Chairman & Managing Director



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms.S.PRIVANKA (REG.NO 2021MSIT05)** a student of MSc[IT], Final year, Fatima college (Autonomous), Madurai, Tamil Nadu has successfully completed her major project, duration from Dec 2022 to Mar 2023 entitled "IMAGE ANNOTATION TOOL USING DEEP LEARNING" at COS AI Madurai. During this period of her major project with us, she was punctual and inquisitive.

We wish her every success in life.

COS AI – Madurai.

(Dr.T.Mayilvahanan)

Authorised Signatory



Quarters:
13, Ground Floor, Kamaraj Nagar 4th St,
Madurai, Madurai - 625 002, TN
93500776
mad@pmail.com
cosai.in

+91 94430 63037

Branch Office : Bangalore | Chennai

Scanned with OKEN Scanner