

SENTINEL: INTELLIGENT MULTI CAMERA FACE DETECTION, RECOGNITION AND TRACKING SYSTEM

A PROJECT REPORT

Submitted by,

**ISRAR AHMED - 20201CAI0107
RISHI RAGAV V - 20201CAI0128
RAKSHITH M B - 20201CAI0117
MOHD FAIZAN USMAN SAIT - 20201CAI0090**

Under the guidance of,

Mr. SHEIK JAMIL AHMED

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At



PRESIDENCY UNIVERSITY

BENGALURU

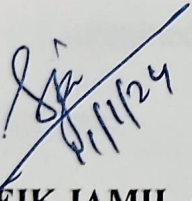
JANUARY 2024

PRESIDENCY UNIVERSITY

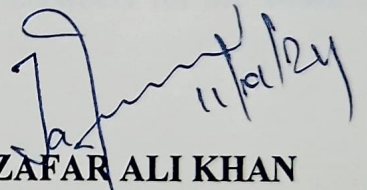
SCHOOL OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

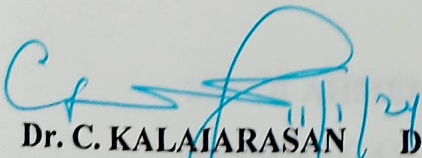
This is to certify that the Project report "SENTINEL: INTELLIGENT MULTI CAMERA FACE DETECTION, RECOGNITION AND TRACKING SYSTEM" being submitted by "ISRAR AHMED", "RISHI RAGAV V", "RAKSHITH M B", "MOHD FAIZAN USMAN SAIT" bearing roll number(s) "20201CAI0107", "20201CAI0128", "20201CAI0117", "20201CAI0090" in partial fulfilment of requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.



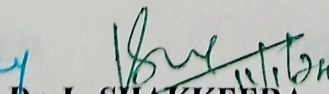
Mr. SHEIK JAMIL AHMED
Assistant Professor
School of CSE
Presidency University



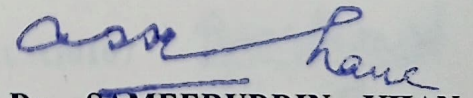
Dr. ZAFAR ALI KHAN
Associate Professor & HoD
School of CSE
Presidency University



Dr. C. KALAIARASAN
Associate Dean
School of CSE&IS
Presidency University



Dr. L. SHAKKEERA
Associate Dean
School of CSE&IS
Presidency University



Dr. SAMEERUDDIN KHAN
Dean
School of CSE&IS
Presidency University

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

DECLARATION

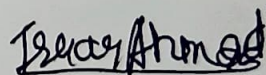
We hereby declare that the work, which is being presented in the project report entitled **SENTINEL: INTELLIGENT MULTI CAMERA FACE DETECTION, RECOGNITION AND TRACKING SYSTEM** in partial fulfilment for the award of Degree of **Bachelor of Technology in Computer Science and Engineering**, is a record of our own investigations carried under the guidance of **Mr. SHEIK JAMIL AHMED, ASSISTANT PROFESSOR, School of Computer Science Engineering, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

Signature

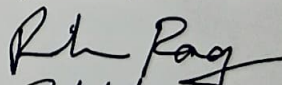
ISRAR AHMED

20201CAI0107



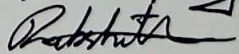
RISHI RAGAV V

20201CAI0128

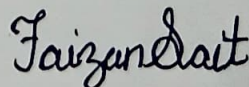


RAKSHITH M B

20201CAI0117



MOHD FAIZAN USMAN SAIT 20201CAI0090



ABSTRACT

Sentinel is an innovative multi-camera system revolutionizing video surveillance through intelligent face detection, recognition, and tracking. Employing advanced computer vision and deep learning models, the system ensures accurate face detection under challenging conditions, enhancing its reliability in diverse environments. By integrating facial recognition technology with a comprehensive database, Sentinel enables rapid identification and alerts for known individuals of interest. The system's intelligent tracking algorithms allow for seamless monitoring and tracking of individuals across multiple camera feeds, mitigating the limitations of conventional surveillance. Sentinel's scalability ensures compatibility with various surveillance camera systems, promoting widespread adoption. Additionally, the system prioritizes privacy by adhering to ethical data handling practices, securely managing facial data in compliance with privacy regulations. Sentinel's cutting-edge architecture marks a significant leap forward in video surveillance capabilities, offering a comprehensive solution for real-time face detection, recognition, and tracking. Its applicability spans across sectors such as public safety, law enforcement, and critical infrastructure protection, making it a vital tool in bolstering security measures and ensuring efficient surveillance operations.

ACKNOWLEDGEMENT

First of all, we indebted to the **GOD ALMIGHTY** for giving me an opportunity to excel in our efforts to complete this project on time.

We express our sincere thanks to our respected dean **Dr. Md. Sameeruddin Khan**, Dean, School of Computer Science and Engineering and School of Information Science, Presidency University for getting us permission to undergo the project.

We record our heartfelt gratitude to our beloved Associate Deans **Dr. Kalaiarasan C** and **Dr. Shakkeera L**, School of Computer Science and Engineering and School of Information Science, Presidency University and **Dr. Zafar Ali Khan**, Head of the Department, School of Computer Science and Engineering, Presidency University for rendering timely help for the successful completion of this project.

We are greatly indebted to our guide **Mr. Sheik Jamil Ahmed**, Assistant Professor, School of Computer Science and Engineering, Presidency University for her inspirational guidance, and valuable suggestions and for providing us a chance to express our technical capabilities in every respect for the completion of the project work.

We would like to convey our gratitude and heartfelt thanks to the University Project-II Coordinators **Dr. Sanjeev P Kaulgud**, **Dr. Mrutyunjaya MS** and the department Project Coordinator **Dr Murali Parameswaran**.

We thank our family and friends for the strong support and inspiration they have provided us in bringing out this project

Student names

ISRAR AHMED

RISHI RAGAV V

RAKSHITH M B

MOHD FAIZAN USMAN SAIT