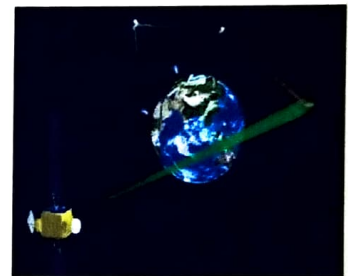
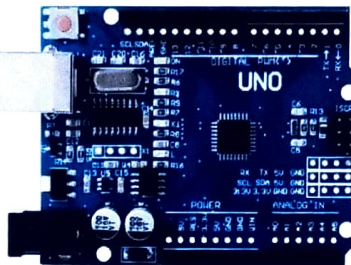
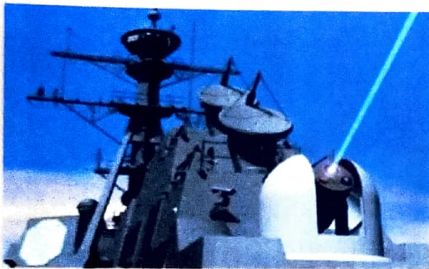


A PROJECT REPORT ON
DESIGN AND DEVELOPMENT OF A COST EFFECTIVE
MICRO-CONTROLLER BASED DEVICE TO LOCATE AND
TRACK BRIGHTEST PIXEL BASED ON IMAGE ANALYSIS

Submitted in partial fulfillment of the requirement for the Degree of
Master of Science in Electronics of the Vidyasagar University

2019



Under the joint guidance of

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Submitted by

Swagata Sarkar

M.Sc. 4th semester

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CERTIFICATE

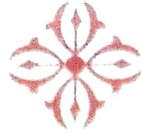
This is to certify that Miss Swagata Sarkar has carried out the investigation entitled "DESIGN AND DEVELOPMENT OF A COST EFFECTIVE MICRO-CONTROLLER BASED DEVICE TO LOCATE AND TRACK BRIGHTEST PIXEL BASED ON IMAGE ANALYSIS" under my supervision in partial fulfillment of requirement for the degree of MASTER OF SCIENCE in ELECTRONICS in VIDYASAGAR UNIVERSITY. During the investigation, she has learned acquisition and analysis of Arduino based microcontroller programming and Servo motor interfacing, MATLAB and Arduino IDE software programming and applied it in her Project work.

Aswini Kumar Mallick
..... 24.06.19
(Dr. Aswini Kumar Mallick)

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संदर्भ सं. / Ref. No. _____

दिनांक / Date :

To Whom It May Concern

Certificate

This is to certify that Miss Swagata Sarkar have been working in our laboratory as summer project student. She joined to work in the area of Design and Development of a Cost-Effective, micro-Controller based device to locate and track brightest pixel based on image analysis.

Her technical abilities include acquisition and analysis of Arduino based programming and Servo motor interfacing. She has learnt state of art interfacing and automation based on MATLAB and Arduino IDE software. Particularly she has developed a cost effective and portable device for locate and track brightest pixel based on image analysis. She is helpful and always enthusiastic to learn new things.

She is tremendously hard working and finishes a job exceptionally fast.

I wish her a very bright and successful scientific carrier.

Soumendhra Singh
Scientist
Bose Institute
Kolkata