VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



A Mini -Project Work on

TAJMAHAL

Information Science & Engineering

Submitted by

| Sriharsha Cp | 1SG19IS104 |
|-----------------|------------|
| Srikanth Mishra | 1SG19IS105 |
| Sujeet Pandey | 1SG19IS106 |
| Surabhi M | 1SG18IS107 |

Under the guidance of **Dr. Asha P.N**Associate Professor



DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING SAPTHAGIRI COLLEGE OF ENGINEERING

(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI.APPROVED BY AICTE, NEW DELHI) 14/5, Chikkasandra, Hesaragatta Main Road, Bengaluru-560107

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Certificate

This is to Certify that the Mini-Project work entitled "TAJMAHAL" is a bonafide work carried out by SriharshaCP(1SG19IS104),Srikanth Mishra(1SG19IS105),Sujeet Pandey(1SG19IS106),Surabhi M(1SG19IS107) in partial fulfillment for the award of the degree of Bachelor of Engineering in Information Science and Engineering of the Visvesvaraya Technological University, Belagavi during the year 2020-21

(Dr. ASHA P.N)
Guide
(Dr. H.R. Ranganatha)
HOD

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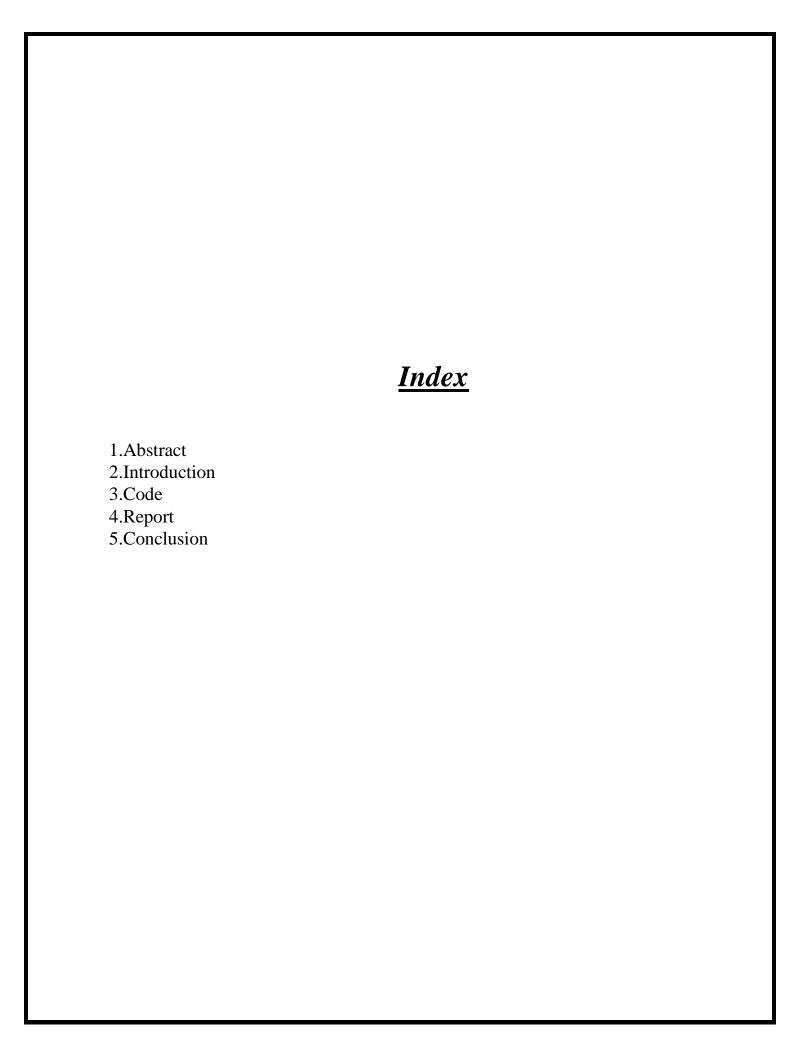
A warm thanks to all the faculty of Department of Information Science and Engineering, who have helped me with their views and encouraging ideas.

(Sriharsha CP)

(Srikanth Mishra)

(Sujeet Pandey)

(Surabhi M)



Abstract

The white marble domes of the Taj Mahal are iconic images of India that attract millions of visitors every year. Over the past several decades the outer marble surfaces of the Taj Mahal have begun to discolor with time and must be painstakingly cleaned every several years. Although it has been generally believed that the discoloration is in some way linked with poor air quality in the Agra region. the specific components of air pollution responsible have yet to be identified. With this in mind, ambient particulate matter (PM) samples were collected over a oneyear period and found to contain relatively high concentrations of light absorbing particles that could potentially discolor the Taj Mahal marble surfaces, that include black carbon (BC), light absorbing organic carbon (brown carbon, BrC), and dust. Analyses of particles deposited to marble surrogate surfaces at the Taj Mahal indicate that a large fraction of the outer Taj Mahal surfaces are covered with particles that contain both carbonaceous components and dust. We have developed a novel approach that estimates the impact of these deposited particles on the visible light surface reflectance, which is in turn used to estimate the perceived color by the human eye. Results indicate that deposited light absorbing dust and carbonaceous particles (both BC and BrC from the combustion of fossil fuels and biomass) are responsible for the surface discoloration of the Taj Mahal. Overall, the results suggest that the deposition of light absorbing particulate matter in regions of high aerosol loading are not only influencing cultural heritage but also the aesthetics of both natural and urban surfaces.

Introduction

Taj Mahal, Agra, India

THE TAJ MAHAL CONSERVATION COLLABORATIVE PROJECT - EXPERTS WORKSHOP, SEPT. 23-28, 2002

In India, under the responsibility of the minister of culture, the government agency responsible for the care and restoration of national historic monuments and sites is the Archaeological Survey of India. It is responsible for thousands of monuments and sites. It employs more than 1,300 professional employees and thousands of workers. The task is immense and the financial resources are scarce. Last year, the ministry of culture decided to launch a new initiative. It decided to team up with carefully selected private sector companies and foundations to further the restoration of a small group of important historic monuments and sites.

On June 21, 2001, the Archaeological Survey of India, the National Culture Fund and the Tata Group of Companies through the Indian

Hotels Company Limited (IHCL) signed an agreement for the "conservation, restoration, upgrade and beautification of the Taj Mahal and the surrounding areas"

The Archaeological Survey of India

Under this agreement, the Archaeological Survey of India retains full responsibility and control for the management and implementation of the projects listed in the Agreement.

The Tata Group of Companies

The Tata Group of Companies is one of the most important corporate groups in India. It owns and operates a wide variety of companies among which is a major chain of hotels. It is the Indian Hotels Company Limited (IHCL) that signed the Agreement on behalf of the Tata Group of Companies. Under the Agreement, it is responsible for financing the restoration work and for gathering a group of "global" experts to review and comment on the proposed restoration work.

The National Culture Fund

The National Culture Fund is an entity created by the government of India to encourage and facilitate private sector donations that are 100% tax deductible. The funds for the restoration projects of the Taj Mahal will be with this agency and it will pay the bills and audit the books.

Code

```
#include<stdio.h>
#include<string.h>
#include<conio.h>
#include<dos.h>
#include<graphics.h>
#include<process.h>
#include<stdlib.h>
void main()
int gd=DETECT,gm;
initgraph(&gd,&gm,"C:\\Turboc3\\BGI");
setcolor(GREEN);
settextstyle(0,EMPTY_FILL,3);
settextstyle(0,EMPTY_FILL,1);
setcolor(YELLOW); setcolor(WHITE);
rectangle(10,420,625,440);
line(15,420,20,360);
line(620,420,615,360);
line(65,420,60,360);
line(570,420,575,360); line(85,420,90,380);
line(135,420,130,380);
line(250,420,250,270);
line(385,420,385,270);
line(250,270,385,270);
rectangle(255,275,380,420);
line(275,335,275,420);
line(360,337,360,420);
line(190,310,250,310);
line(190,320,250,320);
line(155,320,190,310);
line(155,330,190,320);
line(155,320,155,420);
line(385,310,445,310);
line(385,320,445,320);
line(445,310,480,320);
line(445,320,480,330);
line(480,320,480,420);
line(550,420,545,380);
line(500,420,505,380);
```

```
rectangle(195,325,245,370);
rectangle(195,370,245,420);
rectangle(390,325,440,370);
rectangle(390,370,440,420);
arc(315,245,340,210,74);
line(190,285,190,310);
line(190,285,250,285);
arc(220,285,360,180,30);
arc(415,285,360,180,30);
line(445,285,445,310);
line(445,285,385,285);
line(20,360,60,360); line(20,360,15,350);
line(60,360,65,350); line(15,350,65,350);
line(20,350,23,300); line(60,350,57,300);
line(23,300,18,290); line(23,300,57,300);
line(18,290,63,290); line(57,300,63,290);
line(25,290,28,220); line(55,290,52,220);
line(615,360,575,360);
line(575,360,570,350);
line(615,360,620,350);
line(570,350,620,350);
line(575,350,578,300);
line(615,350,612,300);
line(578,300,612,300);
line(578,300,573,290);
line(612,300,617,290);
line(573,290,617,290);
line(579,290,582,230);
line(611,290,608,230);
line(90,380,130,380); line(90,380,85,370);
line(130,380,135,370); line(90,370,93,340);
line(130,370,127,340);
line(85,370,135,370); line(93,340,127,340);
line(93,340,88,330); line(127,340,132,330);
line(88,330,132,330); line(93,330,96,300);
line(127,330,124,300);
line(505,380,545,380);
line(505,380,500,370);
line(545,380,550,370);
line(500,370,550,370);
line(505,370,508,340);
line(545,370,542,340);
line(508,340,542,340);
line(508,340,503,330);
```

```
line(542,340,547,330);
line(503,330,547,330);
line(508,330,511,300);
line(542,330,539,300);
line(160,335,185,328);
line(160,335,160,420);
line(185,328,185,420);
line(160,370,185,370);
line(450,328,475,335);
line(450,328,450,420);
line(475,328,475,420);
line(450,370,475,370);
line(300,170,315,140);
line(330,170,315,140);
line(210,255,220,245);
line(230,255,220,245);
line(405,255,415,245);
line(425,255,415,245);line(28,220,23,210);
line(52,220,57,210);line(28,220,52,220);
line(23,210,57,210);arc(40,230,50,130,25);
line(35,205,40,200);line(45,205,40,200);
line(582,230,577,220);
line(608,230,613,220);
line(582,230,608,230);
line(577,220,613,220);
arc(595,238,50,130,25);
line(595,208,590,213);
line(600,213,595,208);line(95,300,90,290);
line(125,300,130,290);
line(95,300,125,300);line(90,290,130,290);
arc(110,310,48,130,30);
line(105,278,110,270);
line(115,278,110,270);
line(200,348,200,370);
line(240,350,240,370);
arc(240,385,113,135,55);
arc(525,310,48,130,28);
line(512,300,538,300);
line(512,300,507,290);
line(538,300,543,290);
line(507,290,543,290);
line(520,280,525,270);
line(530,280,525,270);
line(200,420,200,400);
```

```
line(240,420,240,400);
line(395,420,395,400);
line(435,420,435,400);
line(435,370,435,350);
line(395,370,395,350);
arc(419,375,95,130,35);
arc(409,374,40,80,35);
arc(419,425,95,130,35);
arc(409,425,40,80,35);
arc(213,422,40,80,35);
arc(213,370,39,80,35);
arc(220,424,90,125,35);
line(200,400,200,395);
arc(315,390,50,125,70);
setfillstyle(1,15);
circle(130,60,30);
floodfill(130,60,15);
setcolor(4);
setcolor(4);
settextstyle(3,0,1);
setcolor(GREEN);
outtextxy(235,450,"Made by: U KNOW ME");
while(!kbhit() )
delay(5);
putpixel(random(630),random(249),random(16) );
getch();
```

Report

#include<stdio.h>: It opens the file and all the file handling function are defined in stdio.h header file.

#include<conio.h>: It is a non standard header file used mostly by MS.dos compiler like turbo C/C++ to provide console input/output.

#include<string.h>: Is the header file required for string functions, this appends not more than n characters from the string pointed by src to the end of the string pointed by dest plus a terminating null character.

#include<process.h>: Process.h is a C header file which contains function declaration and macros used in working with the ads and processes

#include<stdlib.h>: It is the header file of general purpose standard library of C programming language which includes functions involving memory allocation processes, control conversions.

#include<dos.h>: Dos.h is a header file of C language this library has functions that arec program to implement delay()

#include<graphics.h>:The graphics. h header file provides access to a simple graphics library that makes it possible to draw lines, rectangles, ovals, arcs, polygons, images, and strings on a graphical window. The second step is initialize the graphics drivers on the computer using initgraph method of graphics.h library.



Conclusion

In conclusion, every Indian takes pride in the beauty of the Taj Mahal and its heritage. This monument is famous all over the world. Around 2 to 4 million people come to visit the Taj Mahal every year. The beauty and history of the monument attract people the most and makes it famous all over the world.