

# A Very Cool Project

## GRADUATE PROJECT PROJECT

Submitted to the Faculty of  
the Department of Computing Sciences  
Texas A&M University - Corpus Christi  
Corpus Christi, Texas

in Partial Fulfillment of the Requirements for the Degree of  
Master of Science in Computer Science

by

Scott A. King  
Summer 2013

### Committee Members

**Dr. Richard Parent**  
Committee Chairperson

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Committee Member

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**Dr. Scott A. King**  
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## 1. INTRODUCTION

## BIBLIOGRAPHY AND REFERENCES

- [1] Bartlett, M., Hager, J., Ekman, P., and Sejnowski, T. Measuring facial expressions by computer image analysis. *Psychophysiology*(1999), vol.36, 253-263.
- [2] Castrillon, M., Deniz, O., Hernandez, D., and Lorenzo, J. A comparison of face and facial feature detectors based on the Viola-Jones general object detection framework. *Machine Vision and Applications*(2011), 481-494.
- [3] Cohn, T.F., Cooper D., Talyor C.J., and Graham J. Active Shape Models - Their Training and Application. *Computer Vision and Image Understanding*(1995), vol.61, No.1, 38-59.
- [4] Cootes, T., Edwards, G., and Taylor, C. *Active appearance models*, ECCV, 2, 1998.
- [5] Farajzadeh, N., Faez, K., and Pan, G. Study on the performance of moments as invariant descriptors for practical face recognition systems. *IET Computer Vision*(2010), vol.4, 272-285.
- [6] Pulli, K., Baksheev, A., Korniyakov, K., and Eruhimov, V. Real-time computer vision with OpenCV. *Communications of the ACM*(2012), vol.55, 61-69.
- [7] Zaidel, D., and Hessamian, M. Asymmetry and Symmetry in the Beauty of Human Faces. *Symmetry*(2010), vol.2, 136-149.
- [8] Huang, D., Shan, C., Ardabilian, M., Wang, Y., and Chen, L. Local Binary Patterns and Its Application to Facial Image Analysis: A Survey. *IEEE TRANSACTIONS ON SYSTEMS, MAN, AND CYBERNETICS*(2011), vol.41, No.6, 765-781.

This section introduces the project and presents any background necessary to understand the later sections of the document. It should identify the reasons for the project and summarize the contents of the remaining sections of the technical report.

## **1.1 First section**

This section is going to be wonderful.

### **1.1.1 Prior Work**

At some point you need to discuss a literature review of prior work. This could be in the introduction or in a separate chapter.

*Cool Results*

Some sections will have sub sections.

*The Most Cool Results* Sometimes even further sectioning is required.

*Notcool Results*

Multiple subsections are sometimes required.

### **1.1.2 Problem Description**

Multiple subsections are sometimes required.

### **1.1.3 Problem Importance**

Multiple subsections are sometimes required.

Figure 1.1 is an example figure, and Figure 1.2 shows a more complex figure with multiple panels.

Table 1.1 is an example table.

Smith and Jones [3] is the best place to read about this topic. Jones [1] is a wonderful source of information as is Smith [2].

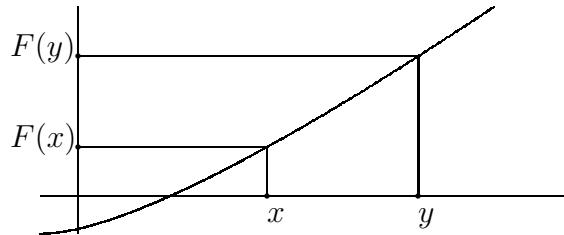
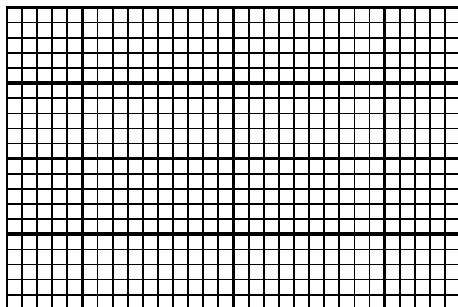


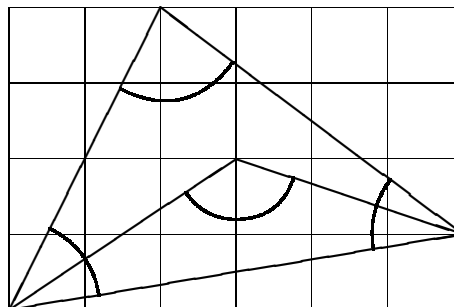
Fig. 1.1. This is a figure.

Table 1.1. A few bones that comprise the skull.

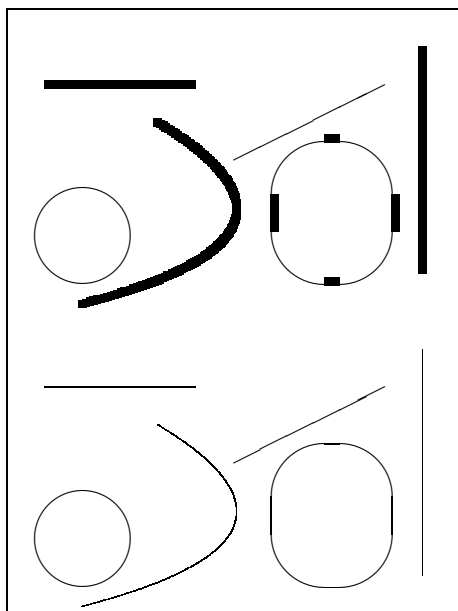
Name	Description
Ethmoid	Forms part of the cranial base and part of the skeleton surrounding the nasal cavities.
Frontal	Forms the anterior portion of the cranium and the vaults of the orbital cavities.



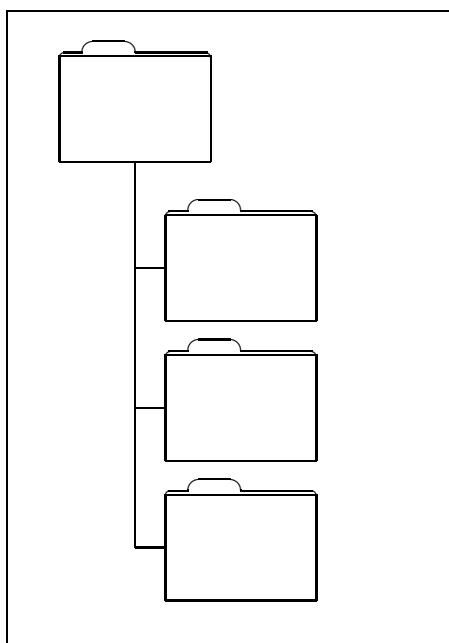
a)



b)



c)



d)

Fig. 1.2. This is a complex figure that has four panels. a) is an example of foo, and b) is an example of bar. c) and d) are there for completeness. Actually, these are all examples of the picture environment. You would most likely do your figures in some package and include them as either a jpg or eps file, depending upon which graphics package you are using.

## **2. PROJECT CODENAME X**

The narrative section should be titled with the name of the system, research, or project. This section presents a description of the project results as they appear to the project's intended audience. It focuses on the "external" aspects of the project results such as user manuals and user interfaces, and leaves the description of the internal project details to the system design section below.

### **2.1 A Section**

blank



blank

## 2.2 Another Section

blank

### 2.2.1 A Section with Some Detail

blank

### 3. SYSTEM DESIGN OR RESEARCH

The system design (or research) section provides a detail description of the "internal" view of the completed system or research. The purpose of this section is to document the analysis, design, and implementation phases of the project so that the reader can fully understand how the project's results were realized. The section should also fully document the major components of the project and its products, including things such as:

- systems used in the conduct of the project (equipment, languages, software packages, etc.),
- systems required for proper operation of systems produced by the project,
- database tables and schemas,
- entity-relationship diagrams,
- input, processing, and output of key programs and functions,
- protocols and interfaces between components,
- file formats, and
- data dictionaries.

1. john

2. fred

Students are encouraged to make good use of structure charts, data flow diagrams, data dictionaries, and other system documentation tools to explain the details of the project.

### 3.1 Module foo.C

## 3.2 Module bar.C



blank

### 3.3 Module bang.C

blank

### 3.4 Module init.C

blank

## **3.5 System Overview**

A high-level description of the system

## **3.6 Part A of the System**

### **3.7 Part B of the System**

This is a simple system part.

### **3.8 Part C of the System**

This one is complex.

## **4. EVALUATION AND RESULTS**

This section describes the results of any evaluation or testing that was performed as part of the project. At minimum this section should describe the results of any testing or evaluation steps identified in the project proposal. This section should also identify any ways in which the project results differ from what was proposed, along with justifications or explanations for the differences.

### **4.1 A Section**



blank

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## 4.2 Another Section

blank

#### 4.2.1 A Section with Some Detail

blank

## **5. FUTURE WORK**

This section identifies additional work or opportunities that exist as a result of the completion of the project. The purpose of this section is to identify the logical "next steps" for the continuation of the project.

### **5.1 A Section**

blank



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## 5.2 Another Section

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### 5.2.1 A Section with Some Detail

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## **6. CONCLUSION**

This section should briefly summarize the outcomes of the project. The committee should be able to read this section to obtain a summary of the important items described in greater detail in the other sections of the document: why this project is important, what it has accomplished, how it accomplished it, and where to go next.

### **6.1 Level 1 What is left to do**

#### **6.1.1 Level 2 Coding**

*Level 3 Coding*

*Level 4 Coding*

#### **6.1.2 Report - Another Level 2 section**

## ACKNOWLEDGMENTS

Place your acknowledgments within these braces if you have any.

## BIBLIOGRAPHY AND REFERENCES

- [1] JONES, J. Title of journal article. *Title of Journal* 76 (July 1990), 27–45.
- [2] SMITH, J. Title of report. Research Report 23, Department of Publication, Name of University, City, State, October 1988.
- [3] SMITH, J., AND JONES, J. *A Smith and Jones Book*, 16th ed., vol. 1. Name of Publishing Company, City, State of Publication, 1983.



## **APPENDIX A – USER STUDY**

I did a user study and found that my users actually used the software.

## APPENDIX B – CODE FOR THE PROJECT

The following is the most awesomest code ever written for a superb project. I am proud to report it only took me two minutes to write this wonderful code.

```
#include <stdio>
#include <stdlib>

int main(int argc, char **argv) {
    int i;

    if (i == 42) then
        return 0;
    else
        return 1;
}
```