

**DESIGN AND FABRICATION OF  
ERGONOMIC GAMING  
MOUSE**

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## **ABSTRACT**

The fast improvement of science and innovation causes the mouse to turn into the most generally utilized item life and work, but also the most frequent computer equipment, so users gradually the use of mouse proposed more requirements, including comfortable operation, flexible moving and accurate positioning, comfort discomfort for the most attention. The mouse also has its problems although various types of mice have been invented thoroughly of the better good for its users. Moreover, the gaming mouse which is leading mice than its peers seem to still offers appropriate users' preferences levels that eliminate the problems above. Hence, the consensus is that gaming mouse selection and purchase should be individualized processes based on individual needs, work demands, usage period and ergonomic matter. The fast improvement of science and innovation causes the mouse to turn into the most

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# CHAPTER ONE

## INTRODUCTION

A computer mouse, plural mice, rarely mouses is a hand-held pointing device that detects two-dimensional motion relative to a surface [1]. This motion is typically translated into the motion of a pointer on a display, which allows a smooth control of the graphical user interface of a computer. Mouse help to control the cursor that is visible on the computer screen while moving the mouse on a flat surface place. Its name was originated from its shape that look like a mouse, because it has an elliptical shaped with a mouse tail. Mouse reduces the usability of a keyboard. A traditional mouse is connected to the computer through cable or cord, but now these days in the market, various types of mouses are available such as a wireless mouse, which those mouses do not need any physical wire to make connection with computer. In technology time, some mouses have many extra buttons to perform other special tasks and it is called a gaming mouse.



Figure 1.1: Computer mouse

Ergonomics is a branch of science that aims to learn about human abilities and limitations, and then apply this learning to improve people's interaction with products, systems, and environments. Ergonomics helps to improve workspaces and the environment to reduce the risk of injury or harm. As technologies such as gaming mouses change, so does the need to ensure that the tools we access for work, rest and play are designed for our body's requirements.

### 1.1 Background of Study

The aim of this project is to create and improve the gaming mouse to a more ergonomic way so that the mouse feels more comfortable and suitable to use without any pain and discomfort. The older gaming mouse is great in design and performance but less