

Chapter 1

Introduction

Eye tracking technique has been widely used in human-computer interaction field and usability research.

1.1 Motivation

1. Why studying eye tracking technique in this project?

As computer development is growing rapidly today, with the computer.

2. Why studying scanpath and STA algorithm in this project?

Scanpath is one of the popular eye tracking metrics which has been applied.

3. Why studying visual methodology and visualisation techniques in this project?

Visualisation always is a helpful way to explore useful information for researchers.

1.2 Research Questions

With the current eye tracking research background mentioned before, and the main purpose of this project.

- What are the differences between STA algorithm and other already existing clustering algorithms?
- What are the advantages and disadvantages of current visualisation techniques?

1.3 Aims

One purpose of this project is to build a web user interface which can call the STA algorithm to generate a trending scanpath and visualise it.

1.4 Objectives

1. In order to better understand the research about eye tracking, scan-path
2. In order to
3. To implement the web

1.5 Deliverables

1. Creating web user interfaces that the user
2. After loading

1.6 Dissertation Structure

The following content of this dissertation is simply introduced in this part

- **Chapter 2** is the background
- **Chapter 3** is the used research methods
- **Chapter 4** is the detailed implementation steps of this project.