**Designing and making judging aid for canoe slalom**

**CM3203 – One Semester Individual Project – 40 Credits**

**Final report**

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# Abstract

In most professional sports some form of video judge is being implemented. Cricket was one of the earliest sports to implement this technology with Hawk-eye back in 2001. With bowlers, bowling at around 90mph, it can be hard for TV spectators to follow the, but with Hawk-eye it allows the spectators and the umpires to replay these fast pasted moments to allow them to make better decisions on close calls.

Canoe slalom is no different. With athletes trying to reduce their times by seconds and cutting it as close as possible to the gates, a judge can only see so much from the bank. This project aims to design and make an accessible system for these canoe slalom judges to allow them to make better split decision calls. The project also aims to evaluate the success of the solution and verify if it could be scaled up and used in competitions at all levels.

# Acknowledgments

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# Introduction

# Background

## A beginners guide to canoe slalom

The main focus of this project isn’t to teach the reader about the intricacies of canoe slalom, an understanding of this sport is useful to fully understand the project. A full list of canoe slalom terminology can be found in the appendix.

In canoe slalom athletes race down a 200 meter course consisting of a minimum of 18 and maximum of 25 different gates, of which 6 must be upstream gates

# Approach

# Implementation

# Results and evaluation

# Future work

# Conclusions

# Reflection on learning

# Appendix

## Code

## Glossary of Canoe Slalom terms

**Downstream –** The direction the water is flowing

**Upstream** – the opposite direction that the water is flowing

**River left –** The left hand side of the river, if you are looking at it downstream

**River right –** The right hand side of the river, if you are looking at it downstream

# References