

# 1 Risk Analysis

As with every project, there is a risk of failure associated with working. I list here some of the regular problems, and the move onto risks specifically related to my project.

## 1.1 Common Risks

### **Slow Pace** (Probability: Possible, Impact: Severe)

This happens when the target time for a project is underestimated, or when the project hits an unexpected snag. Firstly, I have built some stretch time into each section of my workplan, as seen in the workplan section. If this slow pace becomes too drastic, I will use a simple version of my linear code to produce a simple parallel version.

### **Fast Pace** (Unlikely, Negligible)

In the unlikely situation that I work faster than my work plan dictates, I have several options to continue work. Firstly, I can optimise my pre-existing programs, both linear and parallel. This will give me definitive results about how fast my program can recognise Wally in parallel. Secondly, I can create a system that can show members of the public how my program works. This will start to create a project suitable for HPC Outreach.

### **In Absentia** (Possible, Moderate)

Often in projects, a supervisor or student will be unable to attend meetings. This should be negated by the fact that I normally have a netbook on my person, enabling work to be done remotely. This extends to meetings, they can be done online using emails or other virtual techniques.

### **Broken Equipment** (Unlikely, Severe)

If my normal workstation, a netbook, happens to break, I should be able to move work to a desktop. This should be possible if I continuously use a remote versioning system, like github.

### **Sickness** (Possible, Moderate/Severe)

Illness cannot be prevented, but in general I will be able to continue work when ill, and work in absentia. In the case of a major illness, I will have to rely on the methods explained for slow pace.

### **Ennui** (Certain, Moderate)

Inevitably, I will become bored with the area of work I am assigned. I will solve this by working on my report, or on other sections of code, for instance, the visual interpretation of the solution. If I become entirely disillusioned with the project, I will have to simply exercise some willpower; my masters degree relies on this.

## 1.2 Risks Specific to a Where's Wally Solver

### **Unable to Find Wally** (Possible, Catastrophic)

### **Not Allowed To Use Wally** (Unlikely, Catastrophic)

It is conceivable that Walkers Books, publishers of Where's Wally would not allow me

to use their Wally figure. Although I am skeptical as to the legality of that, there are ways around such a problem. I could generate my own Where's Wally type puzzles, with some similarly easy to find figure obscured in a crowd. This could be done by randomly placing a large stock of images on a canvas.

**Not Enough Wally Samples** (Probable, Moderate)

In the case that I run out of Where's Wally images to test my project against, I will have to generate images. I will do this in the same manner as with the above risk.

**Not Fast Enough** (Probable, Negligible)

If my code is not fast enough to compare to the speed that humans can solve a puzzle, then I will have to optimise my code. If this can't be done in a sufficient time frame, then the completion of a parallel solution will have to be the final stage of my project.

**Not Suitable For HPC Outreach** (Probable, Negligible)

This is very likely, and in this case, my project will have to be the starting point for another HPC Outreach project.