Pre-meeting questions /discussion topics

- Still not entirely clear what it is I will be doing for my actual project.
- Originally planned to look at how we can apply rewrite rules in such a way as to optimise particular image processing applications.
- But what applications are these? Stenciling, Gaussian Blur, Canny / Sobel Edge Detection (all previously done by Lift researchers)
- Looked at Kirsch Edge Detection as possible application. Calculates edges in all compass directions. Seems okay for a starting point.

- And how do I go about deciding how rewrite rules get applied? Using ELEVATE? Not ML, Steuwer last week suggested looking at searching through a decision-based tree (Depth-first, bread-first) where each decision is the application of a rewrite rule.
- https://www.lift-project.org/presentations/2015/ICFP-2015.pdf has some good stuff for this but doesn't actually say how the code in slide 38 was automatically generated? Seems to imply decision tree based because of what comes before it.
- Also suggested taking a look at ant colony as possible route.
- Couldn't find much useful things to do with Ant colony, one paper that will need to look through in more detail at a later date.
- Feel like i have too many choices to make and no idea how I should decide.

Meeting Notes

- Group rules together in various ways. High level ones, ones which do more complex transformations in a single step, and ones that encode low level hardware optimisations.
- What are the optimisations we actually care about, how can we express these / encode these in Elevate.
- Thomas wrote 'scanline' manually, then thought about optimisations needed to produce it.
- don't have to be automatic. Can hardcode

Look in test
Then separable filter stuff
Download idea intelliJ
Build.spt inlcude as project in intelliJ to get Scala up and running