Lab 6: Algorithm Mining Using Phenomenology

Alexander Mervar

Indiana University

Lab 6: Algorithm Mining Using Phenomenology

**Section 1: Empirical**

Binocular rivalry is defined as the presence of two different stimuli presented to separate eyes, which creates a non-cohesive interpretation due to the lack of integration. When this takes place, it is common for someone responding to stimuli to report only seeing the image visible to one eye with the stimulus of the other eye completely suppressed. After a given amount of time has passed, subjects could possibly report switching to the other eye’s stimulus and suppressing the interpretation that was dominate moments before. In other instances, some subjects report an image being presented to them when pieces of each stimulus are mixed and create a stimulus that is hard to interpret due to an assortment of different visual features.

If one was to model this behavior, it would be important to gather phenomenological data by presenting various visual stimuli to the eyes. This can be done through the application of standard 3D glasses with a red filter over the left eye and a blue filter over the right. Once these stimuli are presented, the subject would record their experience and interpretation of the stimuli, which can then be used to generate a plausible model.

The stimuli that were presented to the subject were each made to try and create different behaviors and were made to discover different aspects for a possible model. The stimuli are as follows:

**Section 2: Model**

[Placeholder]

**Section 3: Application of Model to the Phenomenology**

[Placeholder]