

# Cognitive State Representation and Visualization of Human Brain

Simple Labs / 20.04.2014

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## *Iteration Report II*

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### Introduction

As Simple Labs, we completed some tasks which belong to this iteration. The detailed information about this iteration and tasks are given below.

### Iteration II

#### Task 1: Processors

We have begun implementing processors necessary for voxel and edge manipulation. Currently, only processors that are deemed necessary by our client is being implemented.

#### Task 2: GPGPU Integration

GPGPU integration is done via CUDAfy.NET . We are looking for processors that can benefit from GPGPU processing.

#### Task 3: Line Drawing Optimizations

Line geometry is generated on the fly with minimal triangles needed and generates very little game objects. Frame count is satisfactory.

#### Task 4: Regioning

This task is currently incomplete. This functionality will be implemented as a processor in the third iteration.

#### Task 5: Coloring

Coloring is implemented via texture mapping. Thus it is easier to change coloring or use arbitrary color maps.

### Conclusion

As of second iterations end, only incomplete task remaining is brain regioning. This task is transferred to third iteration. Our plans on next iterations will continue as written before.