# Learning in Large-Scale Interactive Displays

(Also known as the “Gigapixel Memory” study)

Small display control version of the study

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# Descriptions

See here for example images of the original Gigapixel Display (R.I.P.) and of the OptoTrak® system:

Path Integration Pictionary

## SfN 2013 conference poster

Smith, D., Chung, H., Ragan, E., Self, J., North, C., & Cate, A. D. (2013). Spatial and semantic memory for kinesthetic learning in large-scale visual displays. Presented at the Society for Neuroscience, San Diego, CA.

Link to PDF copy of the poster

### Abstract

Douglas Smith, the study's lead author, presented results at the 2013 Society for Neuroscience meeting in San Diego, CA.

This PDF file (Smith_etal_SfN_2013_abstract_details) includes the rest of the details, including the text of the abstract.

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# 2014 lab project

We completed running participants as a group in Fall and Spring of 2014.

## How to reserve the Gigapixel Display space

Log in to the online schedule website. You will need to have created an account first.

http://hciequip.cs.vt.edu/blacklab/

1. Click on the first item under “My Quick Links” at the top left: “Bookings”
2. On the “View schedule” pull-down menu, select “Black Lab”
3. Scroll down to the find the grid corresponding to the day you want.
4. Click on the part of the grid corresponding to the start time.
5. In the pop-up window that appears, also fill in the end time. Add a note if you like too.
6. Click “Save” in that window.
7. Scroll down to find the grid for your day, and verify that the booking appears where it should.
8. Done!

## What to do with the data files

- Upload them to the VNLab Google Drive folder

VNLab/MATLAB/LLID/SubData/

☒ ~~Write a new version of the .../MATLAB/LLID/loosenup_BigMemory_for_group.m script~~

It's messy right now.

☐ Find and make a copy of TrackingSub.m, which does the motion tracking analysis. Be sure to find all helper function files, too!

# TODO for LLID data

☐ Download and test state – strength Matlab toolbox.

☐ Figure out way to normalize walking paths and superimpose plots of them for different response conditions.

☐ Decide on convenient source of word similarity scores.

☐ Figure out how to use circular coordinates or circular statistics to do regression of pointing errors.

☐ Make scatterplot of correct versus indicated target words' various features course?