steReoscopy revisited useR!2010 Kaleidoscope I July 21 2010

Landon Jensen

Micron Technology, Inc.

<u>Isjensen@micron.com</u>

apologies

 "No information, no sense of discovery, no wonder, no substance is generated by chartjunk" - E. R. Tufte

Deepayan Sarkar. Lattice. R News, 2(2):19-23, June 2002.

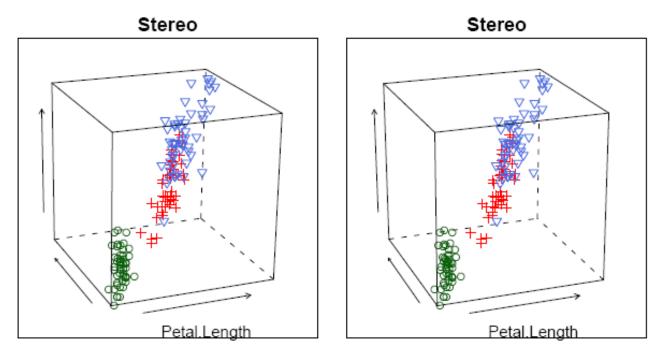


Figure 2: 3d Scatter plots (using cloud) of the Iris data, grouped by Species. Stare at the plot and focus your eyes behind the page so that the two images merge. The result should be the illusion of a 3D image.

making use of...

- Low level graph features
 - Semi-transparent colors in rgb
 - Managing multiple device objects (dev.cur, dev.set. etc).
- Lattice and rgl packages (demos)
 - Change viewpoints

to offer different viewpoints for each eye

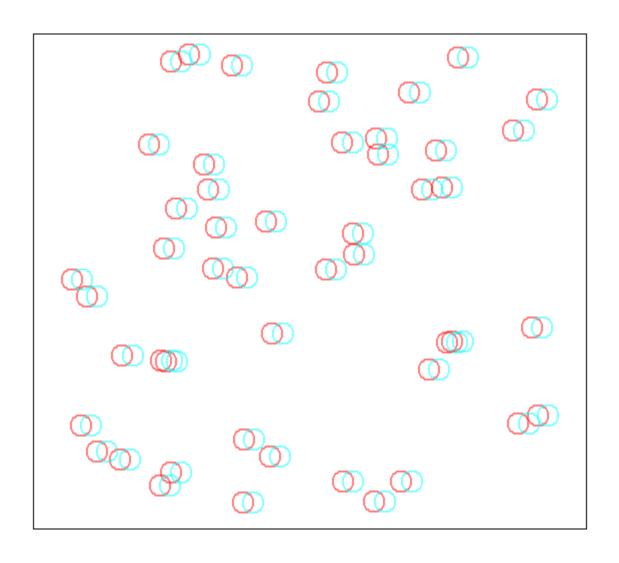
useR!2010

useR!2010

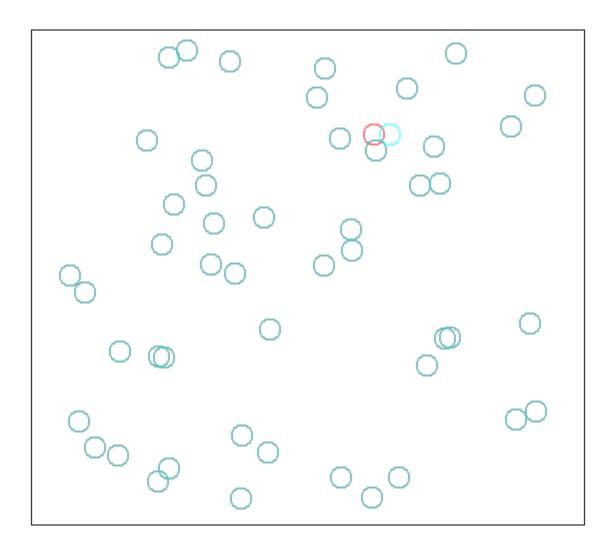


R RuseR!2010

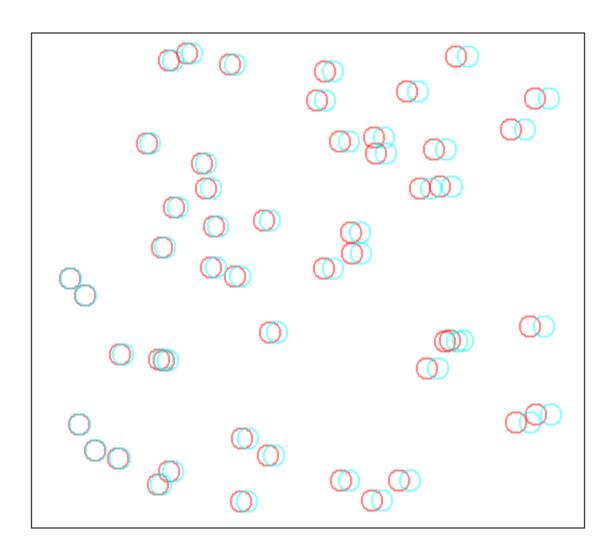






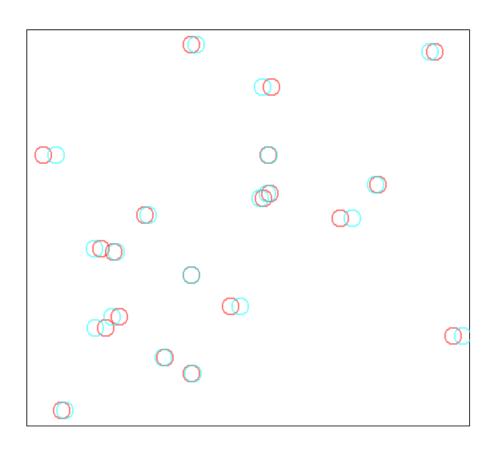




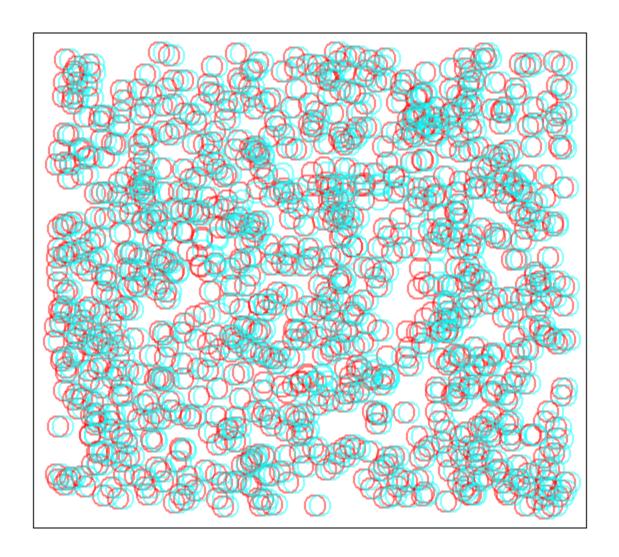




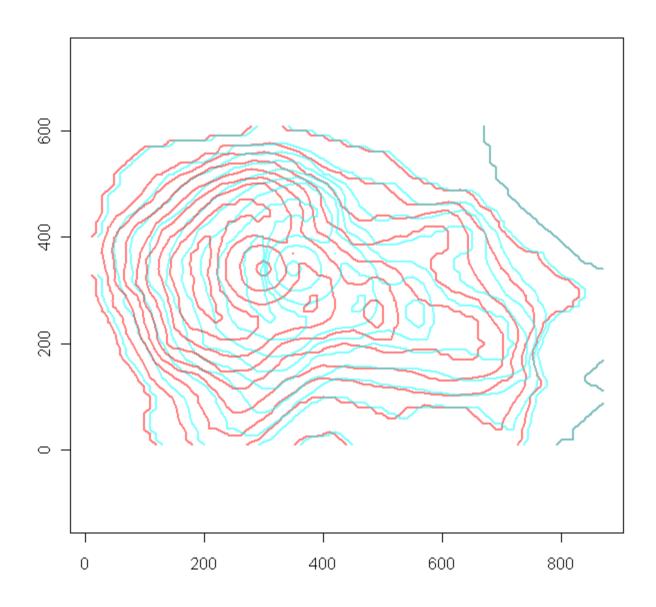
A random walk in the depth dimension (simple animation)



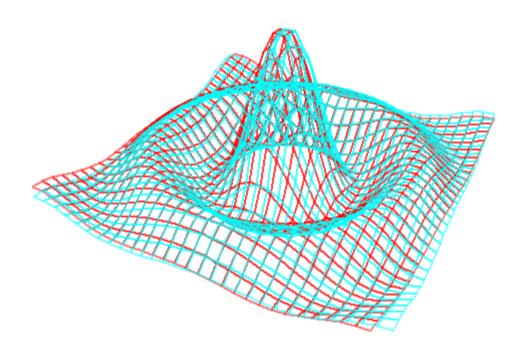






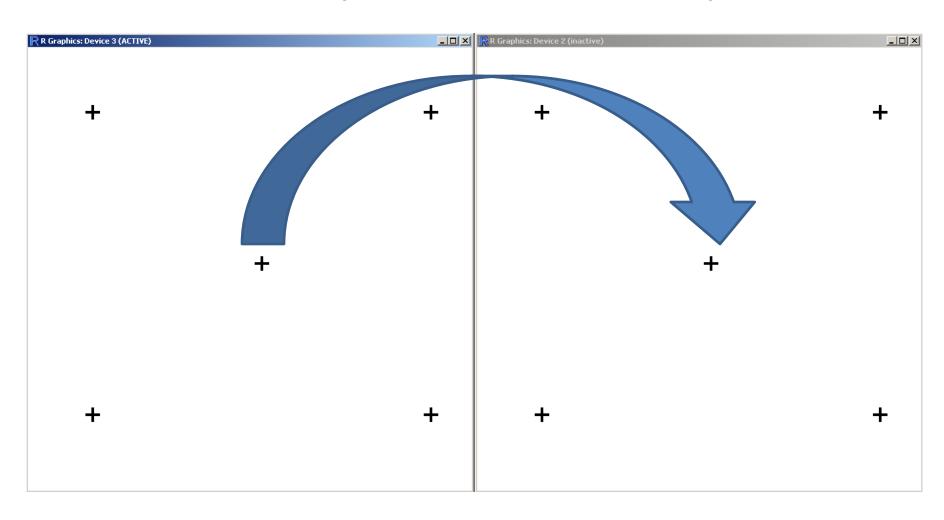


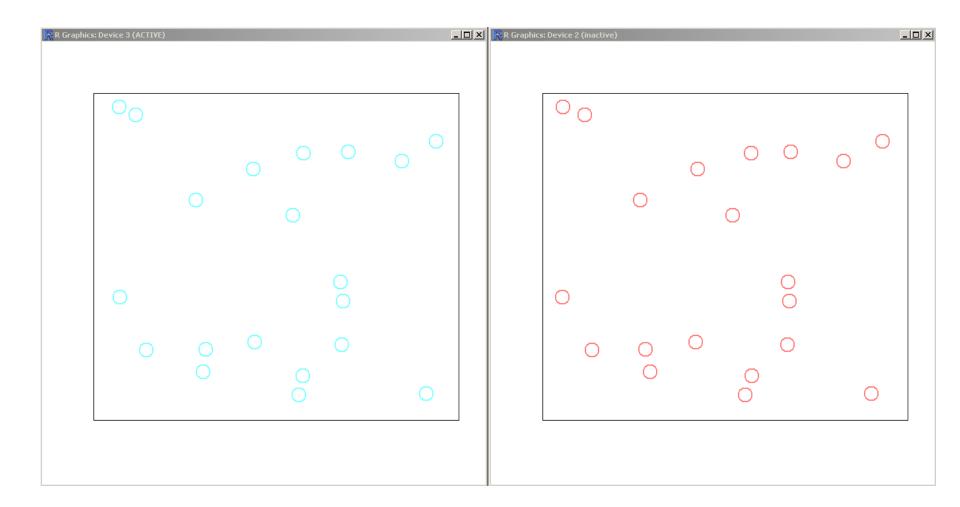






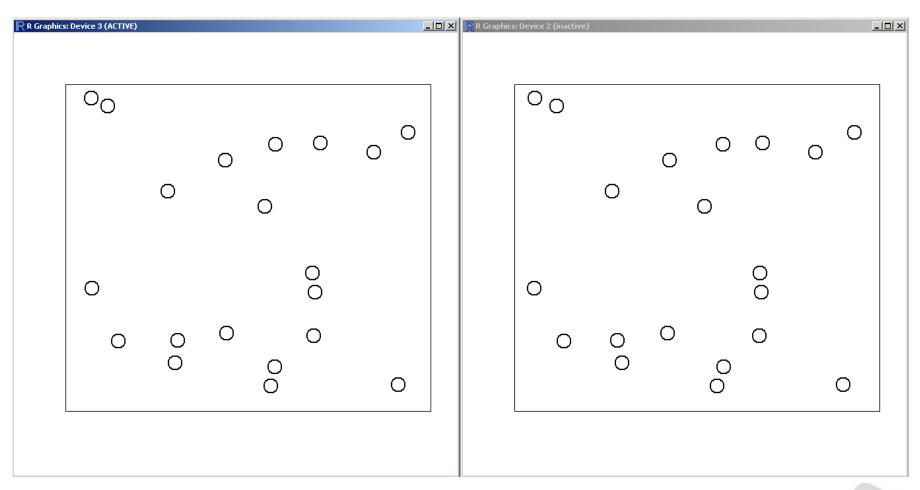
Dual Projector + Multiple device overlay





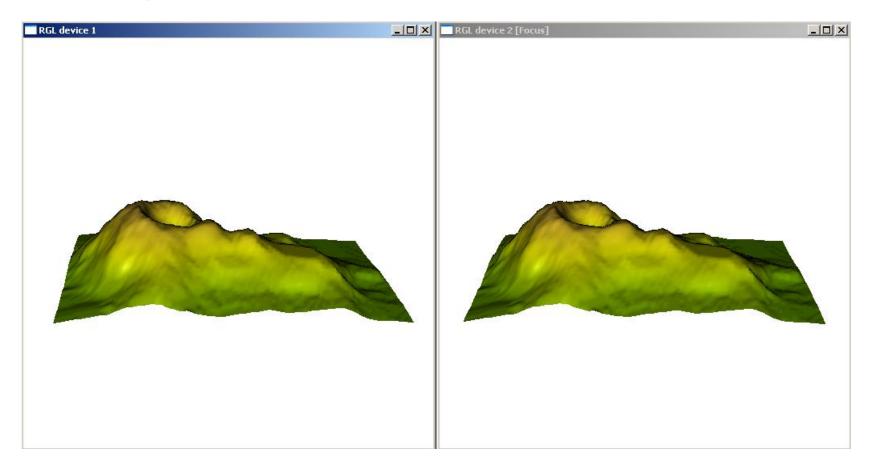


Silver Screen + Linear Polarized Filters





rgl: demo(mouseCallbacks)





Executive Producer

Landon Jensen

Director

Landon Jensen

Makeup and Costumes

Landon Jensen

Beta testers

Grace, Claire, and Miles (my kids)

Special Thanks

Hoyt (NIST AV Services)

No free or open products were harmed in the making of this demo