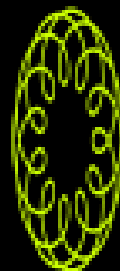
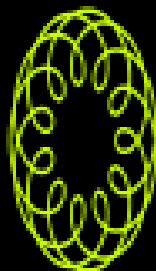
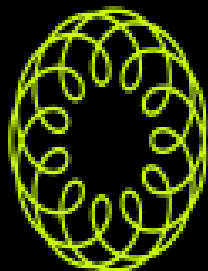
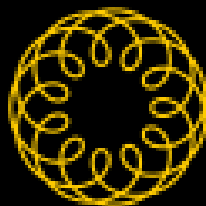
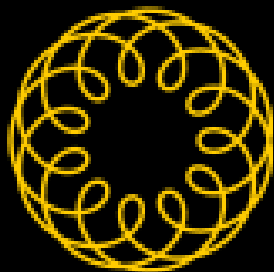


**Taking Accessibility  
to the Next Dimension:**

# **Thoughts About Canvas 3D**

**@kliehm**

**HTML WG & HTML Accessibility Task Force.**





SCORE<1> HI-SCORE SCORE<2>  
0020 0410



+



3



CREDIT 00





```
293     args.newChar = String.fromCharCode(e.charCode),
294     actions.insertCharacter(args);
295   } else { // Allow user to move with the arrow continuously
296     var action = this.keyMap[[e.keyCode, e.metaKey, e.ctrlKey, e.altKey, e.shiftKey]];
297
298     if (this.lastAction == action) {
299       delete this.lastAction;
300     } else if (typeof action == "function") {
301       action(args);
302     }
303   }
304
305   Event.stop(e);
306 }
307 });
308
309
310 // ** {{{ Bespin.Editor.UI }}} **
311 //
312 // Holds the UI. The editor itself, the syntax highlighter, the actions, and more
313 Bespin.Editor.UI = Class.create({
314   initialize: function(editor) {
315     this.editor = editor;
316     this.colorHelper = new Bespin.Editor.DocumentColorHelper(editor);
317     this.selectionHelper = new Bespin.Editor.SelectionHelper(editor);
318     this.actions = new Bespin.Editor.Actions(this.editor);
319     this.status
320     this.history
321     this.GUTTER_WIDTH = 54;
```

**Command History**

ls

clear

status

history



```
<canvas id="canvas" width="500" height="350">  
    
</canvas>
```

<http://www.flickr.com/photos/minifig/72091618/>

- **fallback: shadow DOM**
- **always exposed to AT**
- **keyboard accessible**
- **focus ring in canvas**
- **caret position**





HOME

ABOUT LARGE ANIMAL

## Playable Demo Now Available!

Friday, June 5, 2009 18:16

Comments (9)

The wait is over, The Infinite Journey demo is now available! [Click Here](#)

You will need Google's O3D plug-in to play the demo. [Click Here](#)

The game is currently supported on-

Windows XP and Vista – Chrome, IE8, Firefox  
Mac (Leopard 10.5.7) – Firefox, Safari

Have fun and let us know what you think by leaving a comment in our Global Conversation!

Category: Uncategorized

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## New 3d Concept Character: T-Rocks

Friday, June 26, 2009 16:39

Comments (0)



Search

### Chat About Infinite Journey

#### Large Animal: Infinite Journey

Globale Konversation - [Weitere Information](#)

Anmelden

mit Google Friend Connect



Worked fine in Safari 4 (on my Dell Mini 9 hackintosh with its Intel 950 graphics). Looks great! Wel... [Mehr?](#)  
[synchronmesh](#) 9/1



Great work guys! I'm very interested to see where you take this enjoyable game! Suggestion: A 3D mo... [Mehr?](#)  
[Ben](#) 8/24



WHAT THE HELL HAD THE GOOGLERS THOUGHT ABOUT THIS GAME "Infinite Journey"?

奪命九千

烏勒魯姆

血精靈勘測員

51

# 血精靈勘測員



你製造了: [靈魂碎片]  
 你撿起了4 銀幣, 72 銅幣  
 你製造了: [靈魂碎片]  
 你撿起了5 銀幣, 65 銅幣  
 你拾取了物品: [符文布]  
 你撿起了6 銀幣, 37 銅幣  
 你拾取了物品: [符文布]  
 你撿起了6 銀幣, 54 銅幣

你擊中血精靈勘測員造成108點傷害。  
 你的獻祭使血精靈勘測員受到了121點火焰傷害。  
 你的腐蝕術使血精靈勘測員受到了141點暗影傷害。  
 血精靈勘測員沒有擊中你。  
 你的痛苦詛咒擊中血精靈勘測員造成56點暗影傷害。  
 烏勒魯姆擊中血精靈勘測員造成64點傷害。  
 你擊中血精靈勘測員造成107點傷害。

- **audio cues**
- **earcons**
- **sound radar**
- **tactile feedback**
- **speech synthesis**
- **hardware acceleration**

...books for  
any book below.  
take you to the  
hear the book. The  
help you understand  
use this location and  
will be setting up a  
ve for those Wheelies'  
who have a few items  
not enough for a shop.  
everyone to feel like a  
ing member of the  
Polgara P



- **user generated content**
- **40% of objects in SL don't have alt text**
- **summarize objects**
- **filter nearby objects**
- **screen-reader support**



I am an assistant Professor in the Department of Computer Science and Engineering at the University of Nevada in Reno. The following tag cloud depicts my research interests:

**interaction design** software engineering **games** interaction design

patterns **accessibility exergames haptics** software architecture

**virtual worlds** motor impaired **usability** visually impaired **multimodal**

**feedback** human navigation **Health**

The way we interact with software is increasingly modeled after how we interact with the real world, as such interaction is most natural to us. However, the emergence of immersive 3D technologies such as video games and virtual worlds as well as more intuitive forms of interacting with computers, such as using gestures, raises new barriers for users with disabilities.

My research is motivated by the belief that a disability can be turned into an innovation driver. Through *Extreme Interaction Design*, my students and I try to solve interaction design problems for the most extreme users, with the potential to develop solutions that may benefit anyone. See here for an overview of our [accessibility research projects](#).

## Contact

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## Acknowledgments

The software and data sets provided on this web site are Open Source software projects that are principally funded through the SCI Institute's NIH/NCRR CIBC. For us to secure the funding that allows us to continue providing this software, we must have evidence of its utility. Thus we ask users of our software and data to acknowledge us in their publications and inform us of these publications. Please use one of the following acknowledgments and send us references to any publications, presentations, or successful funding applications that make use of the NIH/NCRR CIBC software or data sets we provide:

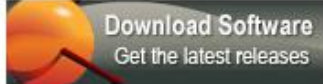
**Please acknowledge the use of CIBC software.** "This work was made possible in part by software from the NIH/NCRR Center for Integrative Biomedical Computing, P41-RR12553-10."

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## ImageVis3d



ImageVis3D is a new volume rendering program developed by the NIH/NCRR Center for Integrative Biomedical Computing (CIBC). The main design goals of ImageVis3D are: simplicity, scalability, and interactivity. Simplicity is achieved with a new user interface that gives an unprecedented level of flexibility (as shown in the images). Scalability and interactivity for ImageVis3D mean that both on a notebook computer as well as on a high end graphics workstation, the user can interactively explore terabyte sized data sets. Finally, the open source nature as well as the strict component-by-component design allow developers not only to extend ImageVis3D itself but also reuse parts of it, such as the rendering core. This rendering core for instance is planned to replace the volume rendering subsystems in many applications at the SCI Institute and with our collaborators.



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### CIBC Software

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| <a href="#">ImageVis3D</a> | <a href="#">Vispack</a>    |



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## WebGL - OpenGL ES 2.0 for the Web

WebGL is a cross-platform, royalty-free web standard for a low-level 3D graphics API based on OpenGL ES 2.0, exposed through the [HTML5](#) Canvas element as [Document Object Model](#) interfaces. Developers familiar with OpenGL ES 2.0 will recognize WebGL as a Shader-based API using GLSL, with constructs that are semantically similar to those of the underlying OpenGL ES 2.0 API. It stays very close to the OpenGL ES 2.0 specification, with some concessions made for what developers expect out of memory-managed languages such as JavaScript.



WebGL brings plugin-free 3D to the web, implemented right into the browser. Major browser vendors Apple (Safari), Google (Chrome), Mozilla (Firefox), and Opera (Opera) are members of the WebGL Working Group.

- [WebGL Draft Specification](#)
- [WebGL Public Wiki](#)
- [WebGL Public Mailing List](#) and [Public Mailing List Archives](#)
- [WebGL Forums](#)

### WebGL

- ▶ [Overview & Spec](#)
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# Bolt-on accessibility



# Inclusive design



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TAIN  
FAC ET SPERA  
FRANCE

# Thanks.



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