ABSTRACT
GravPad is the next major step in the evolution of the EtherPad, a real-time collaborative editor that was first developed at AppJet, Inc. (http://appjet.com/) and recently open-sourced when AppJet was acquired by Google. EtherPad’s developer community, headed up by Egil Møller and John McLear, has made a plugin engine and added standard wiki features to the editor (http://github.com/ether/pad). My GravPad demonstration will show a hacked EtherPad running in a “sidewiki” format – the basis of a platform for live web annotation and content discovery.

Categories and Subject Descriptors
H.3.5 [Information Storage and Retrieval]: Online Information Services—Data sharing, Web-based services; H.3.1 [Information Storage and Retrieval]: Content Analysis and Indexing

General Terms
Design

Keywords
Wikis, Annotation, Content discovery

1. A NEW WAY TO COLLABORATE
In addition to facilitating live, in situ, interaction with web content (Fig. 1), GravPad users can receive real-time notifications about activity taking place anywhere on the web, filtered according to settings in user profiles (Fig. 2). Users will be able to follow people (like on Twitter, indeed, ‘following’ lists can be imported easily), pages (like using a Watch List on a wiki), or concepts (something new).

Combinations of these effects can be used to “bend” the web around one’s interests. For example, GravPad together with http://gutenberg.org would create a massive world-wide book group, which a user can then narrow to focus on topics like “science” or “detective fiction”. User profiles can also be linked together to facilitate swarming behavior, e.g. when working on a class project.

As it matures, GravPad will be great a place to experiment with the temporal and social dimensions of PageRank-like algorithms. In my presentation, I hope to attract interested parties to collaborate on future development.

Eventually, GravPad should have plugin, web portal, and drop-in Javascript interfaces, in order useful to many different people and organizations “right out of the box”. Thanks to the idea of bending, web annotation will be positioned as a key productivity tool for the next decade.

2. THE DEMONSTRATION VERSION
I will begin with a brief tour of the new UI features that have been added to EtherPad since its open source release; features that transform it from being a real time collaborative editor, to being a real time wiki (i.e. links, tags, and a live recent changes page).

I will then show how this real-time wiki can be integrated seamlessly into the browsing experience as a plug-in in Firefox. This plugin will allow the user to open a sidebar containing a “live wiki page” hosting a discussion about the current URL, and a scrolling “live recent changes” frame showing any activities taking place on the Web that the user has
asked to be notified about.

The plugin’s configuration will allow the user to create several profiles, each of which can specify pages, people, and concepts to subscribe to. This version of GravPad matches concepts using the “concept forest” algorithm introduced in [2].

3. CONCLUSION
Although “really real-time” document-based collaboration has been possible for some time using programs like Gobby [1], spreading such interactions across the web seems to be something new. Scaling up presents a variety challenges, but already we see in this demo how GravPad’s two key features – live interaction and intelligent content discovery – make it a truly social tool, and an important step towards the “read-write web”.

4. ACKNOWLEDGMENTS
The research work described in this paper is partially funded through the ROLE Integrated Project, part of the Seventh Framework Programme for Research and Technological Development (FP7) of the European Union in Information and Communication Technologies. The figures were made with Balsamiq Mockups.

I would like to thank Craig Ugoretz for preliminary discussions about the GravPad backend. Many thanks also to the EtherPad team!

5. REFERENCES