Push the Study to the App Store Evaluating Off-Screen Visualizations for Maps in the Android Market

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Experiments in the wild

The introduction of publicly available application stores for mobile devices enables to publish research prototypes to a wide audience. This distribution channel can be used to conduct studies with participants from all over the world and diverse backgrounds.





The Off-Screen Problem

Different solutions have been proposed to visualize "off-screen" objects for digital maps. We imple-

mented stretched arrows, scaled arrows, and Halos for an Android map application with an interactive tutorial. We measured the time and map-shifts needed to complete the tutorial with each visualization technique.

Results!?

We collected samples from 3491 users, >33 different devices, and 101 locales. Users need significantly more time and map-shifts with Halos (p<.001) to complete the tutorial. However, we can't ensure that we measured what we intended to measure. Our results are likely affected by the visualizations' "interestingness".

