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### 'Pre-social network' finds you friends in your hang-outs

24 November 2011 by [Paul Marks](#)  
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**Editorial:** "Taking the chance out of chance encounters"

IMAGINE a "pre-social" network - a bit like the "pre-crime" unit that figured in [Minority Report](#). Such a network would predict where users will go, how long they will stay and who they are likely to meet there.

It may sound Orwellian, but a team which has developed technology that does this believes it could spawn a novel form of social network - one which tells its users where and when people with similar interests or habits are likely to congregate.

The system, named Jyotish after the Sanskrit term for [Hindu astrology](#), was developed at Boeing's [research centre at the University of Illinois](#) in Urbana-Champaign. Boeing needs it to predict the movements of work crews in its huge aircraft factories, but the system's developers, Long Vu and Klara Nahrstedt, reckon it can do a lot more.

Jyotish, Vu explains, draws up maps of people's movements by monitoring the connections their smartphones make to Wi-Fi and Bluetooth networks, which have ranges of 100 and 10 metres respectively - small enough to pin down users' locations and thus who they meet. Vu tested this by giving 79 volunteers Android smartphones whose Wi-Fi and Bluetooth modems were made trackable (*Pervasive and Mobile Computing*, DOI: [10.1016/j.pmcj.2011.07.004](#)).

This detailed log of users' movements and habits can be used to create a mobile version of Facebook that allows people in the same area to create a "hang-out event", Vu says. "Indeed, this version of Facebook could even recommend that people create a hang-out event because they are likely to be in the same location in the future."

Peter Bentley, a computer scientist at University College London, says this kind of predictive ability can be handy as long as users' identities are kept private. "They could ensure that computer resources are in the right places at the right times so everyone would always have a good Wi-Fi signal, for example," he says.

However, he is concerned that users' privacy could easily be compromised by such a pre-social network. "How would you feel if your future happenstance meetings were all predicted in advance? What if anyone could predict exactly where you will be and who you will be with? It's a stalker's dream," he says.



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