



The Technion Center of  
Excellence in Exposure Science  
and Environmental Health

מרכז מצוינות  
בחשיפה סביבתית  
ובריאות בטכניון

### Seminar Invitation

## Leveraging pervasive mobile technology for exposure science and environmental health

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**Nov 21, 2012 at 12:30**  
**Grand Water Research Institute auditorium**

Even the simplest mobile phone can be used to capture time-stamped self-reported data. These "tweets with a purpose" can be integrated with web-based applications that prompt, store, analyze, and visualize; providing individualized traces relevant to health status, exposures, and behaviors. Moreover, more modern smartphones can be programmed to automatically record GPS coordinates, wireless fingerprints, accelerometer readings, and the digital exhaust of other mobile apps. These personal data streams can in turn be processed to create detailed, geocoded, time-stamped, activity logs of our everyday lives. When combined with the wealth of available spatial data and models these activity *traces* can be used to make strong inferences. Unlike much of the data captured by Internet and social media services, activity and self-report traces are already personally identified, legally reusable, and easily available to the individual. We have the opportunity to learn from our own traces, and at the same time inform environmental science. In this talk I will describe applications and approaches developed through work at begun at UCLA and now continuing at Cornell Tech, NYC.