Title
Improving Personal and Environmental Health Decision Making with Mobile Personal Sensing

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Improving Personal and Environmental Health Decision Making with Mobile Personal Sensing

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Introduction: Building a mobile personal sensing toolbox

Each application contributes something different to the mobile personal sensing toolbox

Focus on server-side analytics and the user experience

Solution: Contributions from each application

Configurable software on the phone periodically samples on-board sensors (e.g. GPS, image)

Activity classification and other analytics pre-process data.

Existing models are used to calculate an individual’s carbon impact and PM2.5 exposure. Data is displayed on a map, and in other formats with an emphasis on user legibility.

AndWellness: Real-time assessments and feedback on diet, stress, and exercise

Engaging phone app with reminders triggered by time, place, or (in the future) data or activity.

Server-side visualization and analytics highlight correlations and trends across time and space.

AndAmbulation: a system for monitoring chronic disease status and response to medication

Visualization and analytics of mobility and location highlight significant variations in behavior in time or space.

PEIR: Outdoor exposure monitoring in Los Angeles

Project Surya: Indoor pollution exposure monitoring in rural India