

Health and Wellbeing Short Deck

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Why is health and wellbeing important?



- Design for detecting Frustration, Pain, Boredom and Delight!
 - I.E., how do people really react to our products?
- Make people more productive
- Provide a complement to relationship to therapists
- Teach positive coping skills
- Facilitate behavioral change for improved lives
- Alert medical/family caregivers in times of need....
- Etc.

What is this new field and why is it hard?

- **Affective computing** is the study and development of systems that can recognize, interpret, process, and simulate [*or respond to*] human affect
 - It is an interdisciplinary field spanning computer science, [psychology](#), and [cognitive science](#)
- *Hardest problems: (1) how to recognize emotions? (2) how to integrate emotional data? (3) how to act upon recognizing an emotion?*

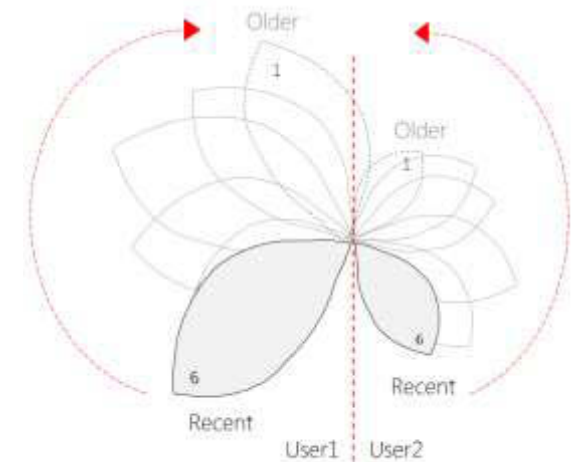
Who is doing it?

- Research is being carried out on:
 - Sentiment analysis in text
 - Video-based (facial) emotion detection
 - Posture
 - Speech analysis
 - Brain imaging
 - Eye tracking and pupil dilation
 - EEG
 - EKG
 - EDA
 - Psychology/psychiatry

Sensor Revolution: Health and Beyond

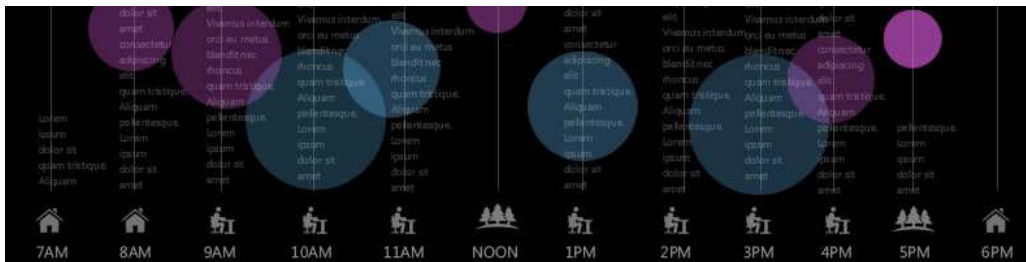


#1 Displaying Emotion to the User

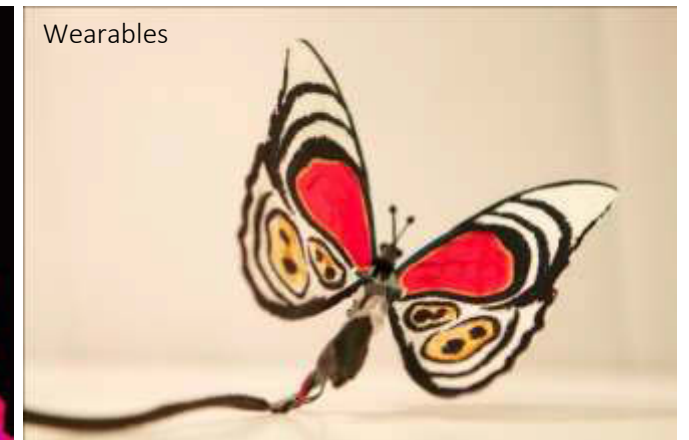


Every Minute a New Petal Appears

Real-Time Emotional Feedback



Visualizations



#2 What do you do about it? Mobile Intervention Apps

Laura Pina, Kael Rowan, Paul Johns, Asta
Roseway, Ran Gilad-Bachrach, Pablo
Paredes, Mary Czerwinski



#3 Exploring Interventions and Context



"Bubo" can assist you throughout the day.

Wise Heart



"A wise heart can handle almost anything, here are some ways to get there."

Body Health



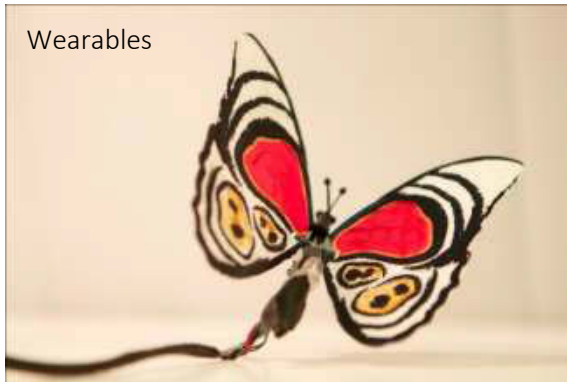
"Bodies need rest too, let's give yours a break, shall we?"

Master Mind



"A skillful mind can lead to skillful behavior, let's try."

Personal Agents



Wearables



Ambient Devices



Mobile



Real-Time Interventions



Real-Time Interventions



Positive Computing at MSR: All things emotional

Thank You for Your Attention!

Questions?

<http://poscomp.net/>