Value Sensitive Design:
Shaping Technology with Moral Imagination

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The work reported here has been generously supported by the National Science Foundation Awards IIS-9911185, SES-0096131, IIS-0102558, EIA-0121326, IIS-0325035, IIS-0849270, CNS-0905384, IIS-1143966, UW Tech Policy Lab and numerous private individuals.

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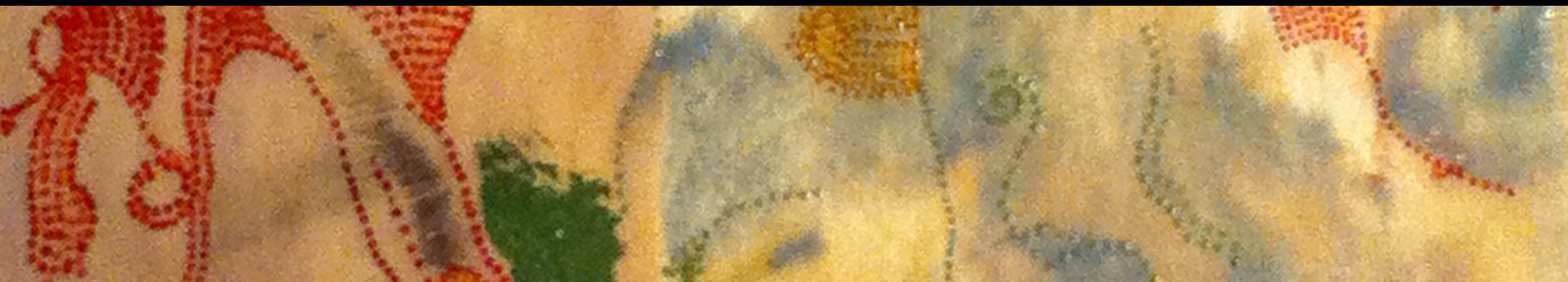
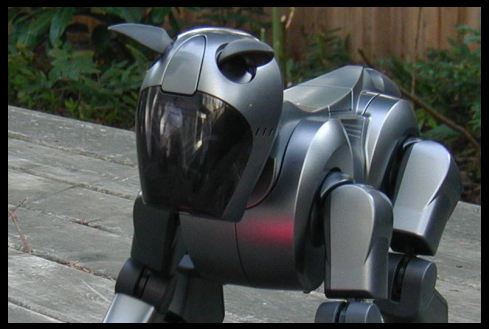
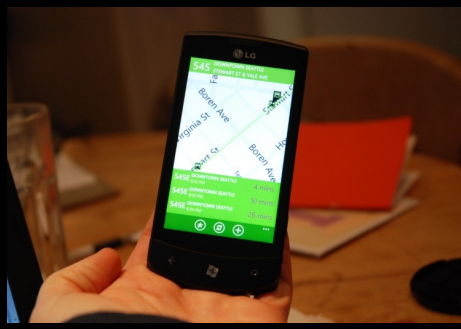
Moral Imagination

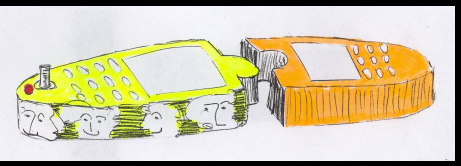
Technical Imagination

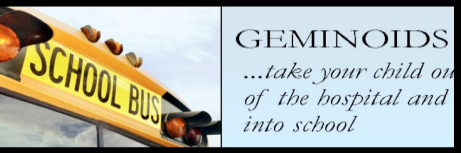


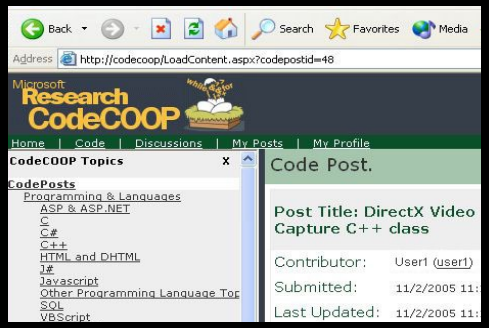
Stakeholders

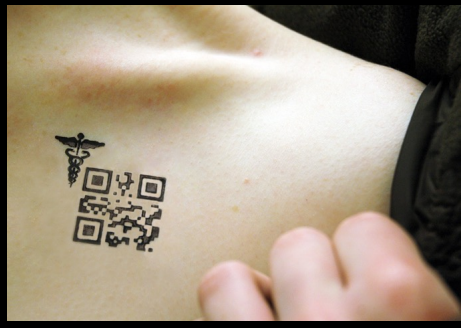












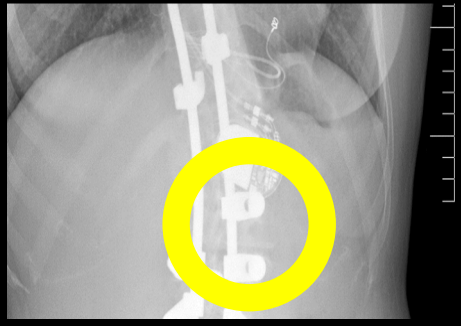


Photo Credit: Snow Leopard Trust

Design Activity

Sleeve

Sleeve is a hypothetical, embodied technology which uses a brain computer interface to detect the wearer's affective states, then displays those affects through an e-textile garment. The fabric can change colors, texture, and shape according to the feelings of the wearer. Sleeves can be worn by people, such as those with autism, to help make their emotions more accessible to the people around them.

A Toolkit: Envisioning Cards

envisioningcards.com

Stakeholders · Time · Values · Pervasiveness

Perceptions of a Value

Sometimes stakeholders have different perceptions of the definition of a specific value (e.g., some may define privacy as having control over your information vs. those who define privacy as being left alone).

Investigate a value. In user studies, have participants write a brief (1-2 sentence) definition of that value as it relates to the system. Identify any substantive differences in participant perceptions.

Investigate

(Friedman, Nathan, Kane and Lin, 2011)

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Card 1

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Stakeholders · Time · Values · Pervasiveness

Consider Children

Children often appropriate systems originally designed for adults. How might this system influence a child's social and moral development?

Develop a scenario that portrays a seven-year old interacting with the system. How might the system influence the child's learning, or play with other children?

Develop

Card 2

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Stakeholders · Time · Values · Pervasiveness

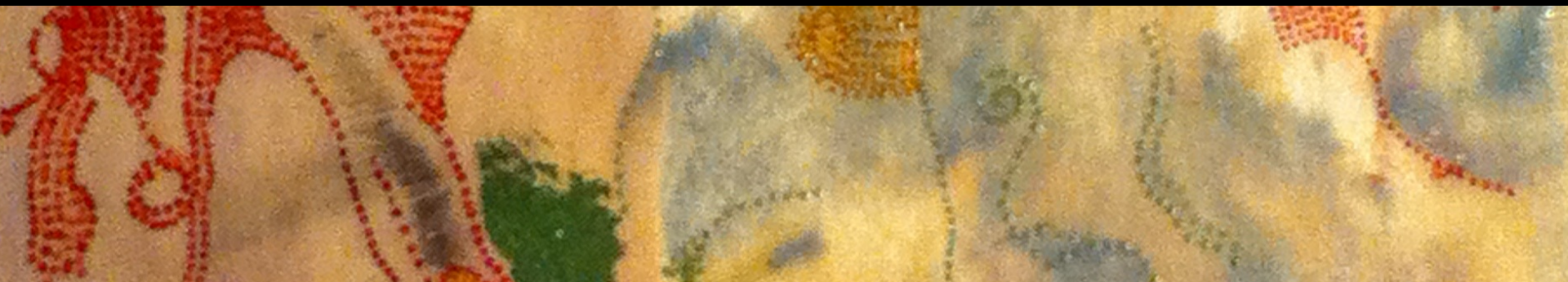
Accounting for Culture

Breakdowns can develop when people from one culture make assumptions about the conventions, norms, or practices of other cultures. How might your system be misunderstood by users who are unfamiliar with your culture?

Record 2-3 positive effects of your technology when used within your own cultural context. How might those effects be different in another culture? Develop and discuss potential breakdowns.

Record

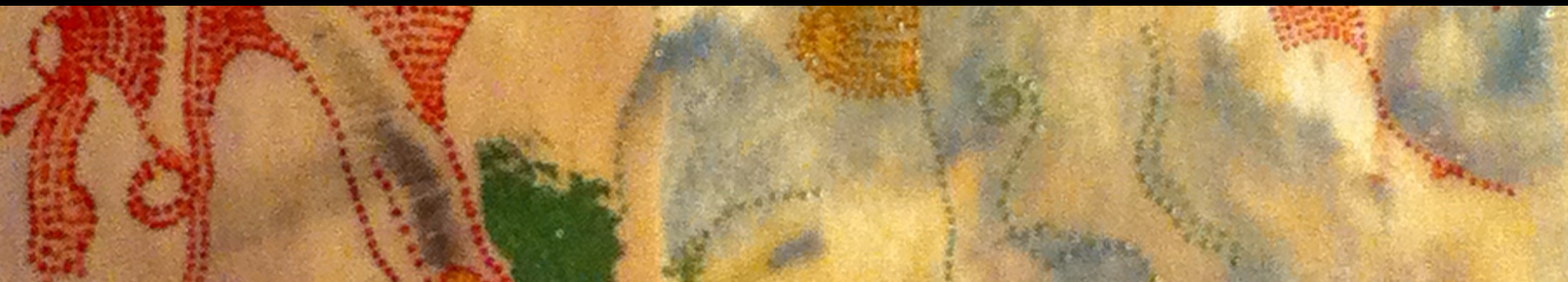
What's a technical decision got to do with it?



Example 1:

Twitter-like channel.

140 characters in a “tweet.”



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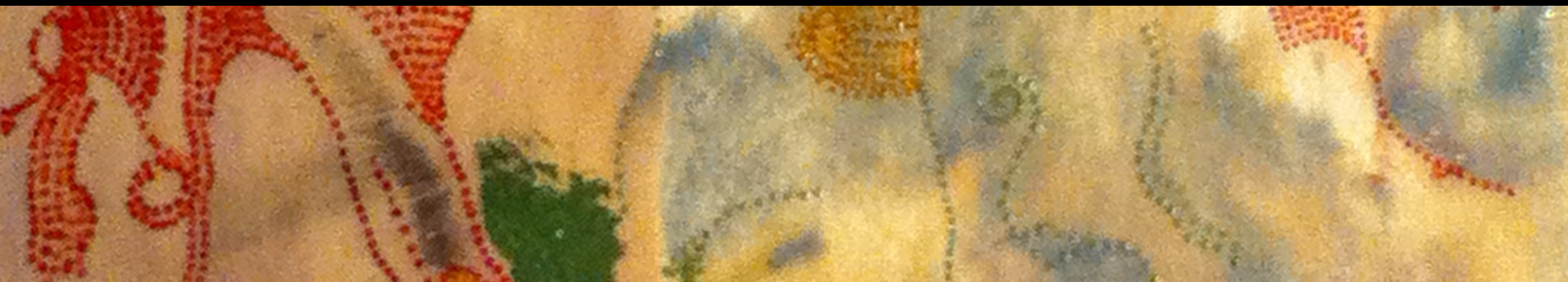
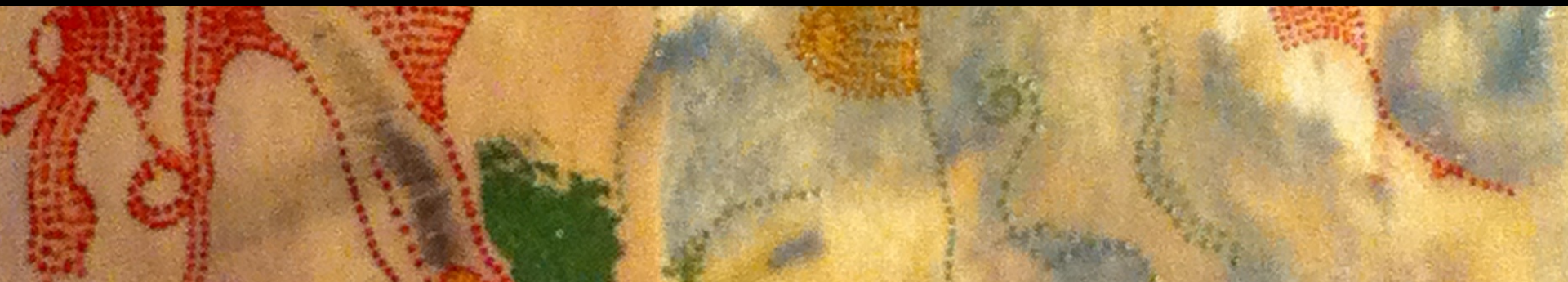
English vs. Kinyarwanda



Example 2:

Scheduler for “virtual” meeting.

Automatic time-zone converter.



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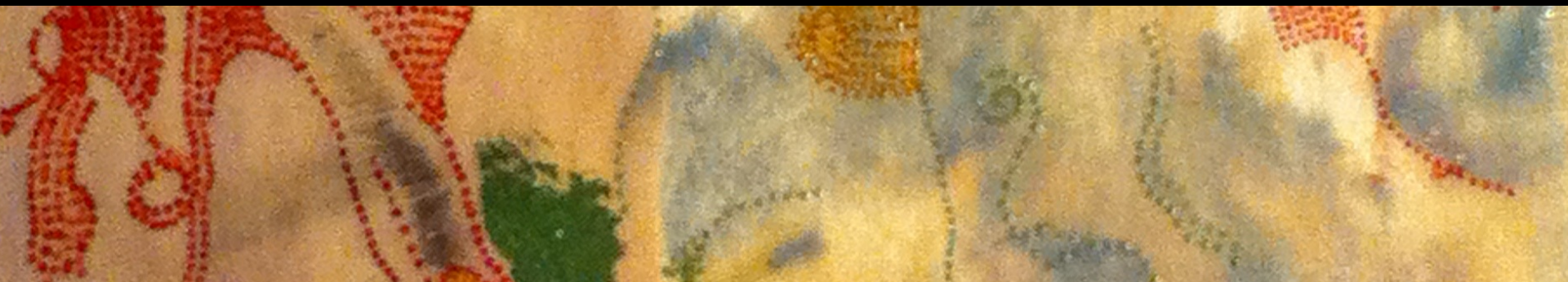
Absolute vs. Situational Time



6 Practical VSD Takeaways

1. There are methods. Use them. Frequently and throughout the product development (design and engineering) process.
2. Use human values as a criteria for evaluating system performance (alongside of other criteria such as reliability).
3. Co-evolve technology and social structure (policy).
4. Think long term. And at scale.
5. Planet: finite, yet regenerative. Engineer within this constraint.
6. Have the courage NOT to build. Just say "no."


Progress
not perfection

Thank you!

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