

Breakout 7: Human-centered computing (Bob Sproull, leader)

James Allen, U of Rochester, AI, natural language

Mike Gorman, NSF, social psychology, collaboration

Eli Blevis, U. Indiana, HCI, designer

Sushil Prasad, Ga. State, parallel and distributed computing

better design can help

Blevis example of programmable thermostat

rather than buttons, just two temp dials that you can make hotter, colder

operating complex systems

hire a local teenager to program your system

take user through scenarios and ask for user decisions => learn rules

can extract constraints; preferences by scenarios

concrete scenarios are better than rules

can learn from real episodes, past history, get consumer to critique

example: (Allen) transport planning; have built research prototypes

dubbed "dialog-based collaboration"

social networking?

can this be turned to advantage? now, the successful ones just evolve

ride-sharing group: coming to trust your driver

Leo Bonnanian (sp?) at MIT Media Lab

investigate how humans will adapt to severe climate change

gaming to explore how to operate in futures

a la Sim City, World of Warcraft

what makes games compelling?

information feedback channels are increasingly noisy, untrustworthy

(Obama birth, autism caused by vaccine, conspiracy theories)

how to trust data

decision support -- in presence of lots more data

even figuring out a winter weather forecast today can be hard

visualization of data deluge

understanding scientific data (and not drawing erroneous or conspiratorial conclusions)

part of society understanding, adapting, becoming sustainable

Extended HCC (coined by Bill Tomlinson)

computer mediates communication to not just individuals but social groups,

planet, even other species (fish ladder?)

distance collaboration

the perennial savior -- still not done well

differentiate collaboration needs by task