

Pervasive, Persuasive Health: Some Challenges

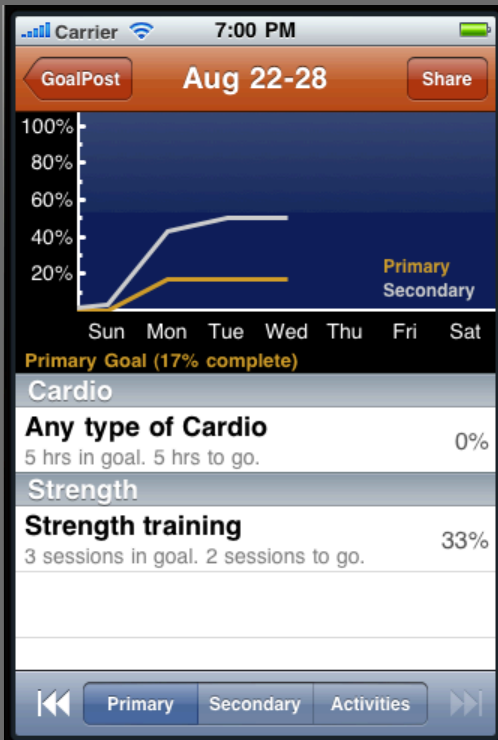
Sean A. Munson

MISC

Michigan Interactive and Social Computing

dub

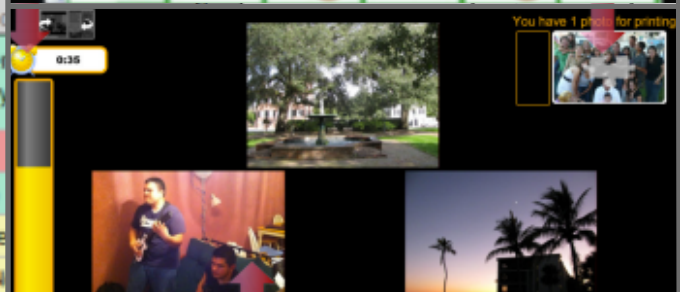
pervasive, persuasive health



HEALTH WATCH

Show 10 Entries

Entry date & time	Type
All	All
Mar 05 2012 23:00:00	Glucose
Mar 05 2012 22:45:00	Meal
Mar 05 2012 20:30:00	Glucose
Mar 05 2012 19:30:00	Meal
Mar 05 2012 18:50:00	Glucose
Mar 05 2012 18:00:00	Exercise
Mar 05 2012 16:00:00	Meal
Mar 05 2012 13:25:00	Meal

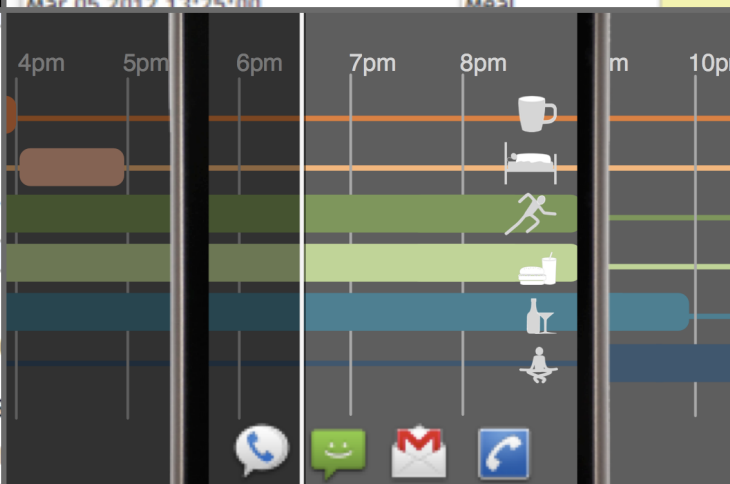


Sean Munson
logout · settings

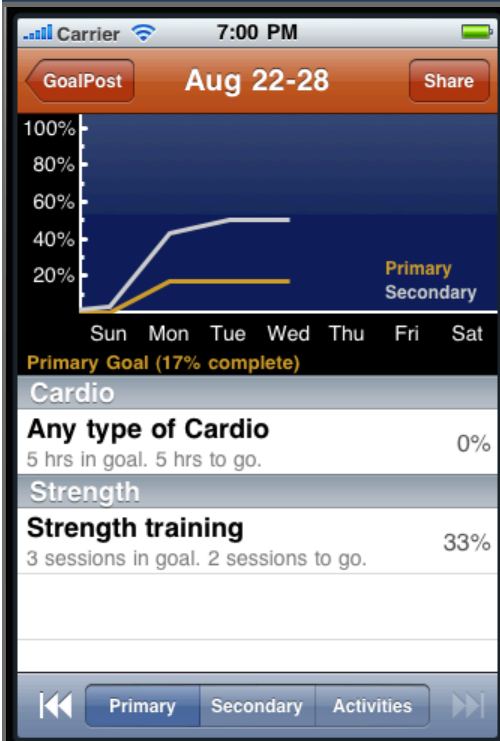
810 GOOD THINGS **0.8** PER DAY

YOUR TOP GOOD THING WORDS

3gt alex aston day delicious dinn
finally fun **good** great hike las
made more new night out run ti



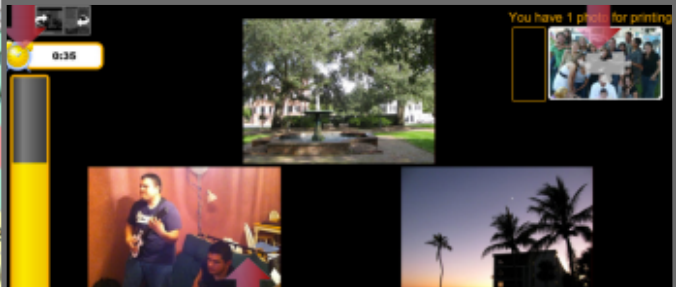
what's next?



HEALTH WATCH

Show 10 Entries

Entry date & time	Type
All	All
Mar 05 2012 23:00:00	Glucose
Mar 05 2012 22:45:00	Meal
Mar 05 2012 20:30:00	Glucose
Mar 05 2012 19:30:00	Meal
Mar 05 2012 18:50:00	Glucose
Mar 05 2012 18:00:00	Exercise
Mar 05 2012 16:00:00	Meal
Mar 05 2012 13:25:00	Meal

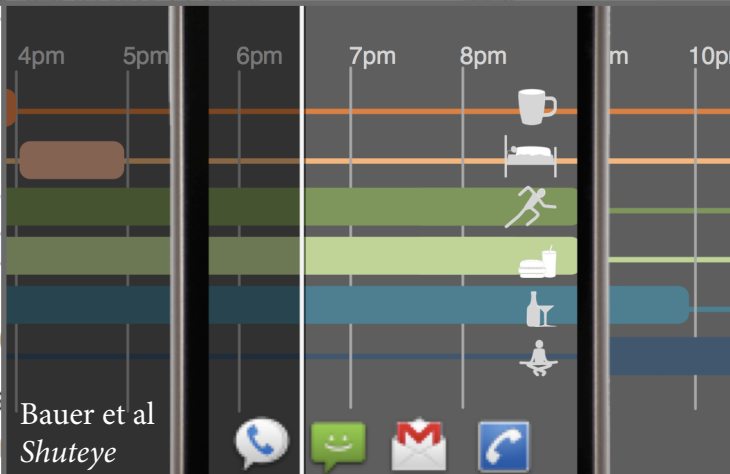


3GT

Sean Munson
logout · settings

810 GOOD THINGS **0.8** PER DAY

YOUR TOP GOOD THING WORDS
3gt alex aston day delicious dinn
finally fun **good** great hike las
made more new night out run ti



what's next?

- continued incremental improvement, integration of new technical capabilities, & reconciling different findings. more careful / precise studies.
- individual differences in preferences and responses
- Major areas that have not received enough attention from the Health+HCI community?
 - **One-time behaviors**
 - **Tapering and weaning off of the intervention**

one-time behaviors



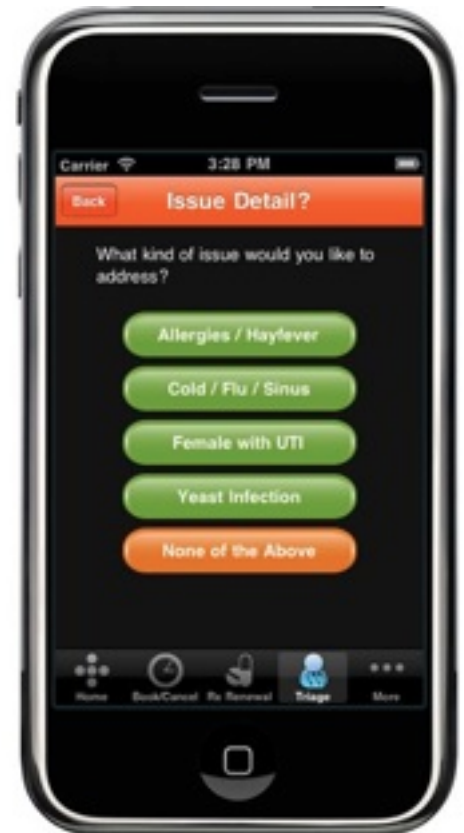
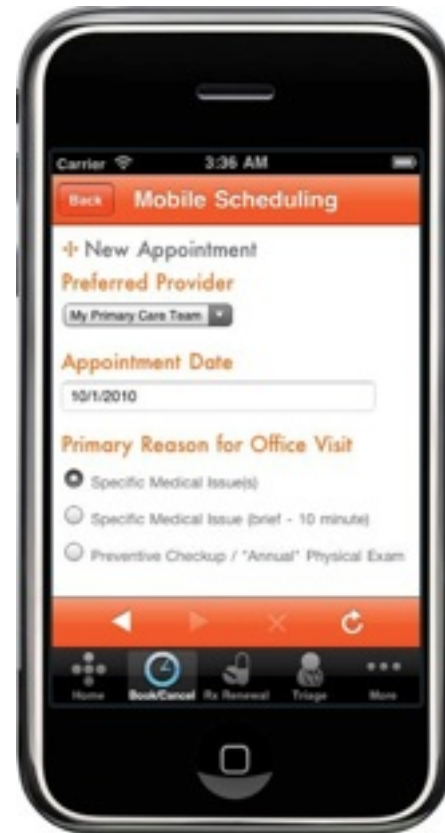
some persuasive advantages of tech carry over

- monitoring to identify people who would most benefit from a screening or from a vaccination
- tailored messaging
- at the right time and right place (*kairos*)
- social networks and social messaging

but how do we engage with people in the first place?

but how do we engage with people in the first place?

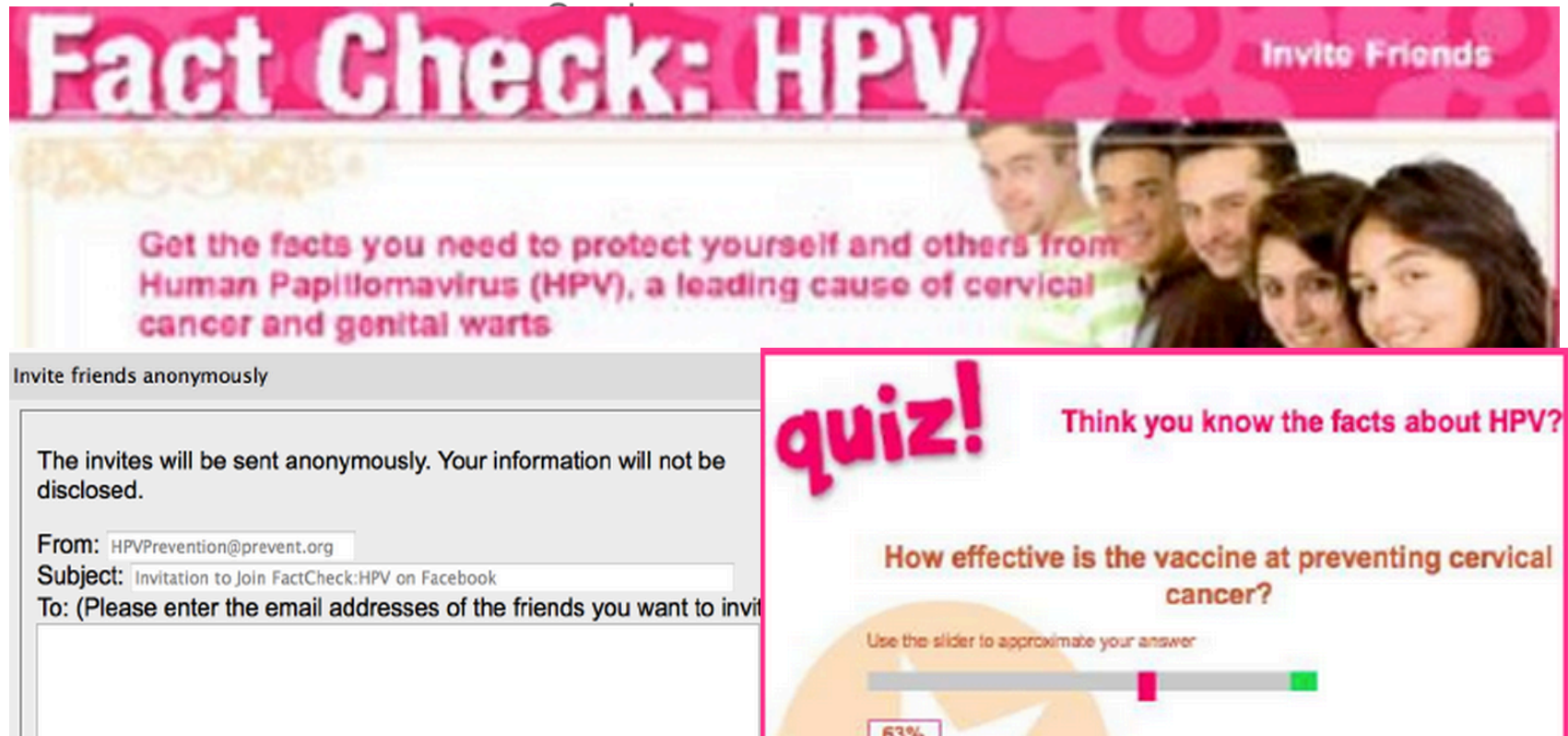
- Bundling



Distribute messages through consumer-facing EHR app?

but how do we engage with people in the first place?

- Bundling
- **Veiled viral messaging** (Hansen & Johnson)



The image shows a screenshot of a Facebook invitation for a quiz. The top banner features the text "Fact Check: HPV" in large white letters on a pink background, with "Invite Friends" in the top right corner. Below the banner is a photo of a diverse group of young adults. The main text reads: "Get the facts you need to protect yourself and others from Human Papillomavirus (HPV), a leading cause of cervical cancer and genital warts".

Below the main text is a form titled "Invite friends anonymously". The form contains the following text:

The invites will be sent anonymously. Your information will not be disclosed.

From: HPVPrevention@prevent.org

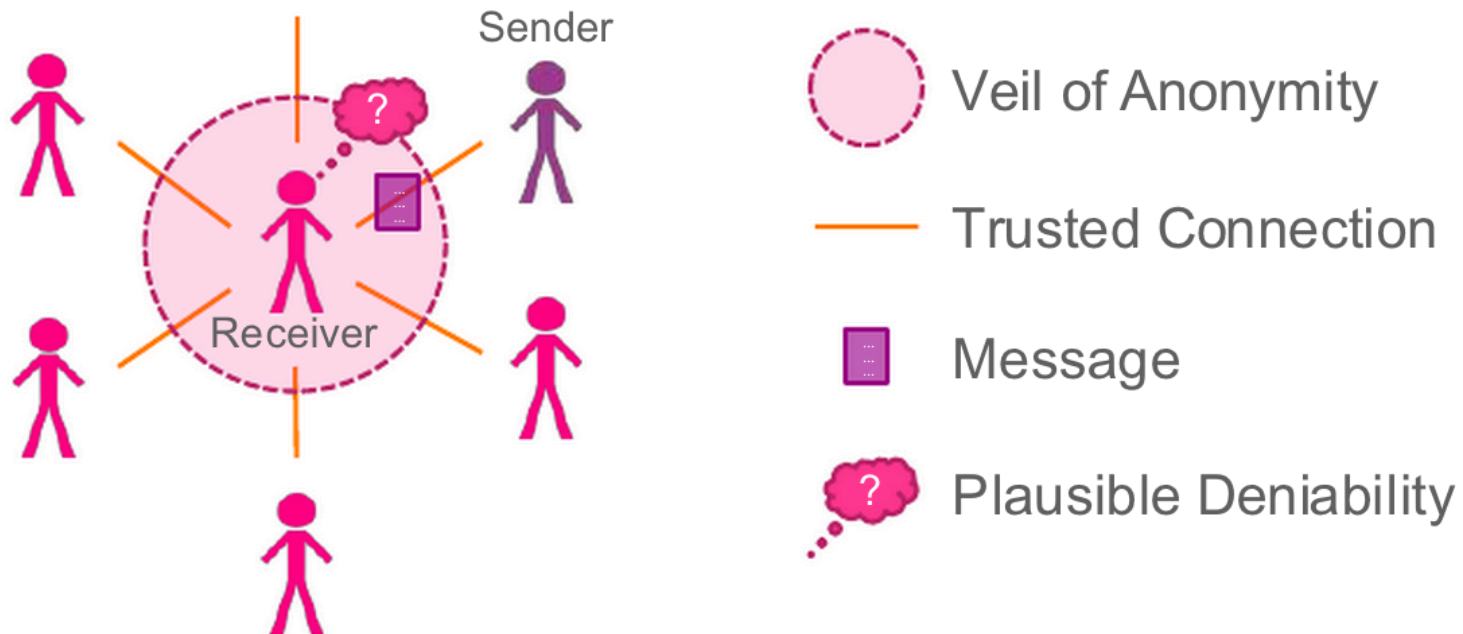
Subject: Invitation to Join FactCheck:HPV on Facebook

To: (Please enter the email addresses of the friends you want to invite)

On the right side of the invitation, there is a quiz interface. It features the word "quiz!" in a large, stylized font. The question is: "How effective is the vaccine at preventing cervical cancer?". Below the question is a slider bar with a red and green gradient. The slider is currently positioned at approximately 63%, with the number "63%" displayed below it.

but how do we engage with people in the first place?

- Bundling
- **Veiled viral messaging** (Hansen & Johnson)



Socially Bounded Anonymity

“One of your friends who wishes to remain anonymous...”

but how do we engage with people in the first place?

- Bundling
- Veiled viral messaging (Hansen & Johnson)
- **Immunization drives on Facebook, etc.**



Today is Election Day What's this? • close

Find your polling place on the U.S. Politics Page and click the "I Voted" button to tell your friends you voted.

02622744
People on Facebook Voted

I Voted

VOTE

f Troy Westhaus, Devin Adair, and 7 other friends have voted.

The image shows a Facebook interface for an election day campaign. At the top, it says "Today is Election Day" with a "What's this? • close" link. Below this is a circular graphic with a red top half containing three white stars and a blue bottom half containing three white stars, with the word "VOTE" in white text across the center. To the right of this graphic is a blue button that says "I Voted". Further right is a counter showing "02622744" in white text on a blue background, with "People on Facebook Voted" written below it. At the bottom of the interface, there is a row of small profile pictures of users who have voted, followed by a Facebook logo and the text "Troy Westhaus, Devin Adair, and 7 other friends have voted."

but how do we engage with people in the first place?

- Bundling
- Veiled viral messaging (Hansen & Johnson)
- Immunization drives on Facebook, etc.
- **We need more tools like this**

tapering, weaning, graduating



Sean Munson

logout · settings

810 GOOD THINGS 0.8 PER DAY

YOUR TOP GOOD THING WORDS

3gt alex aston day delicious dinner

finally fun **good** great hike last

made more new night out run time up

YOUR TOP REASON WORDS

Post a Good Thing

Good thing:

Why it happened:

Public:

Post to Facebook wall:

Good Things

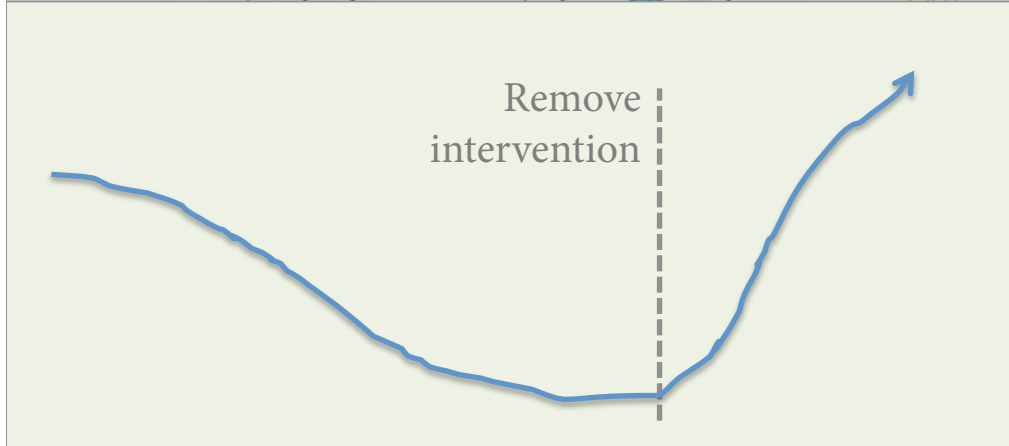
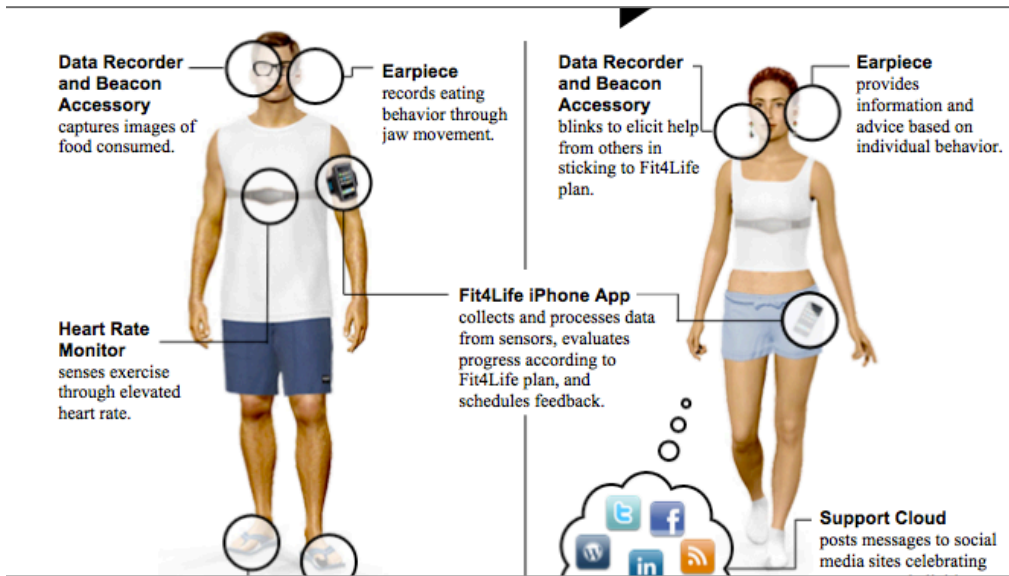


Sean Munson

feel like we have a d



if we don't...



**how can we build apps that encourage
development, and then are no longer needed?**

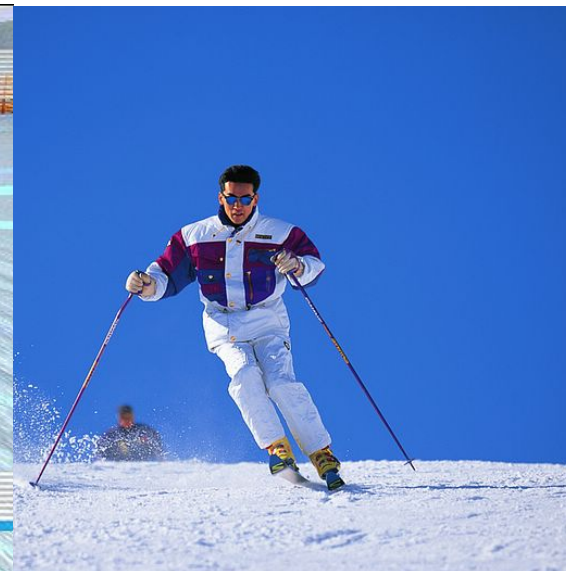
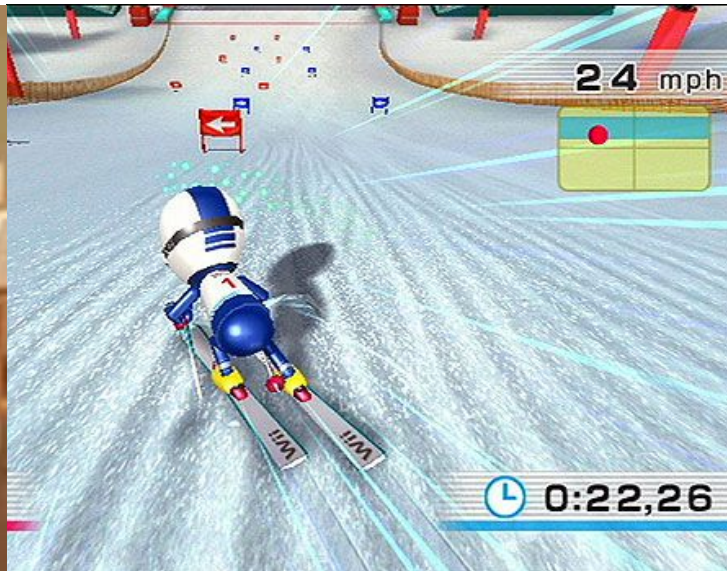
how can we build apps that encourage development, and then are no longer needed?

- *don't* make them frictionless and easy, or make them more difficult over time: quizzes, reduced scaffolding, etc.



how can we build apps that encourage development, and then are no longer needed?

- *don't* make them frictionless and easy, or make them more difficult over time: quizzes, reduced scaffolding, etc.
- **Interventions as gateways to activities that are more intrinsically rewarding** (e.g. Schwanda et al on *Wii Fit*)



one-time behaviors

tapering, weaning, graduating

[your challenge here]

Sean A. Munson

@smunson · smunson@uw.edu · smunson.com