

All the Feels: Introducing Biometric Data to Online Gameplay Streams

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EMOTION AND AROUSAL TOOLS

Name	Video	Location of Device	GSR	HRV
Empatica	No	Worn, Wrist	Yes	No
Affdex	Yes	Webcam	No	No
Microsoft Band	No	Worn, Wrist	Yes	Yes
Apple Watch	No	Worn, Wrist	No	Yes
Muse	No	Worn, Head	No	No

Comparison of consumer grade biometric devices



Microsoft Band – tracks heart rate and GSR

- Easily integrated SDK
- Minimal distraction for Player
- Maximal biometric data gathering

Affdex – tracks levels of emotion

- Facial expression analysis software
- Real time detection
- Label player's emotions

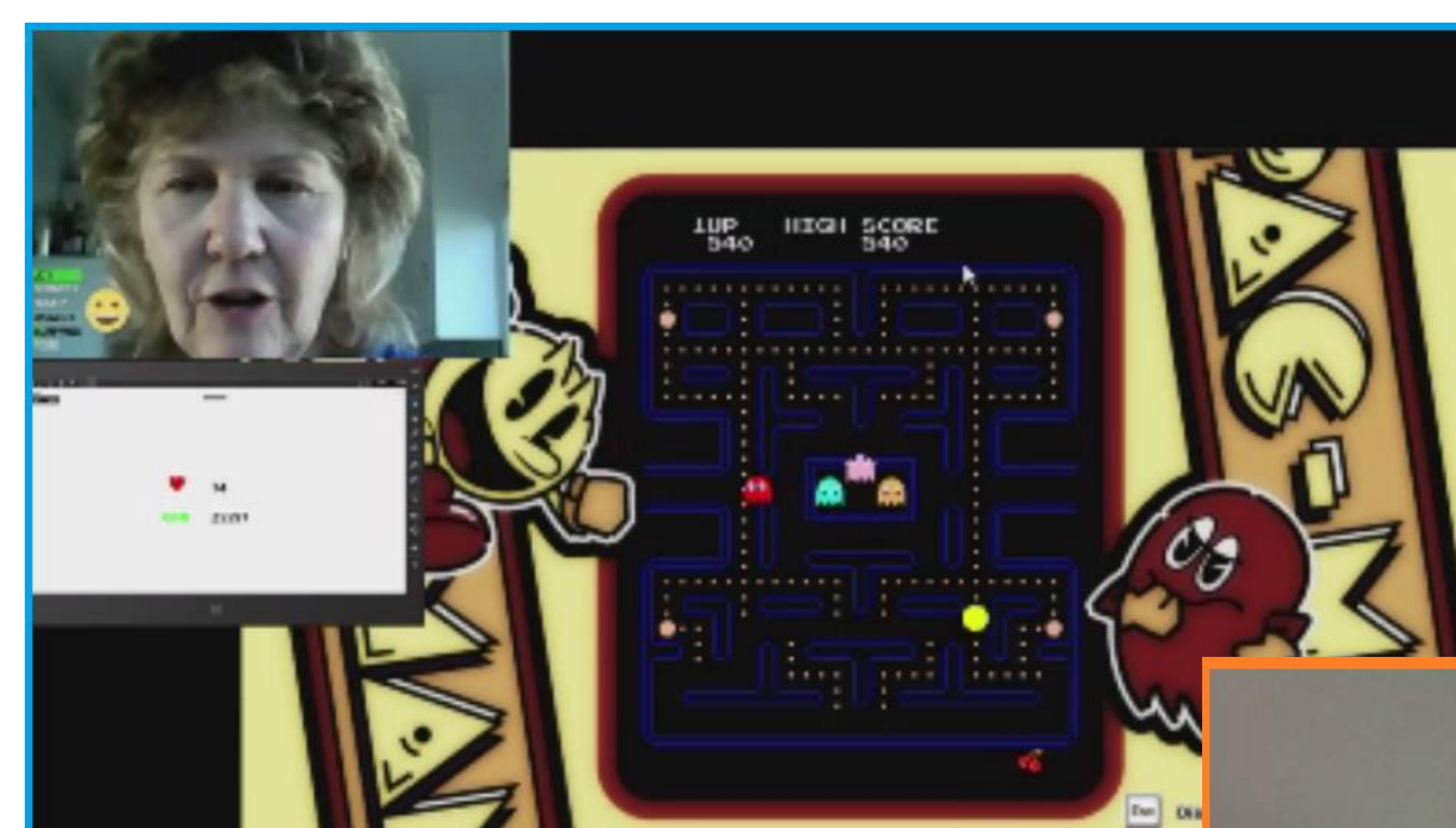


Heads up display on Twitch of All the Feels. The blue box is the webcam display, the orange box is the Affdex output, the purple box is the GSR and HR data, and the red box is the screen size

How can we improve the spectator experience by exposing streamers' emotions?

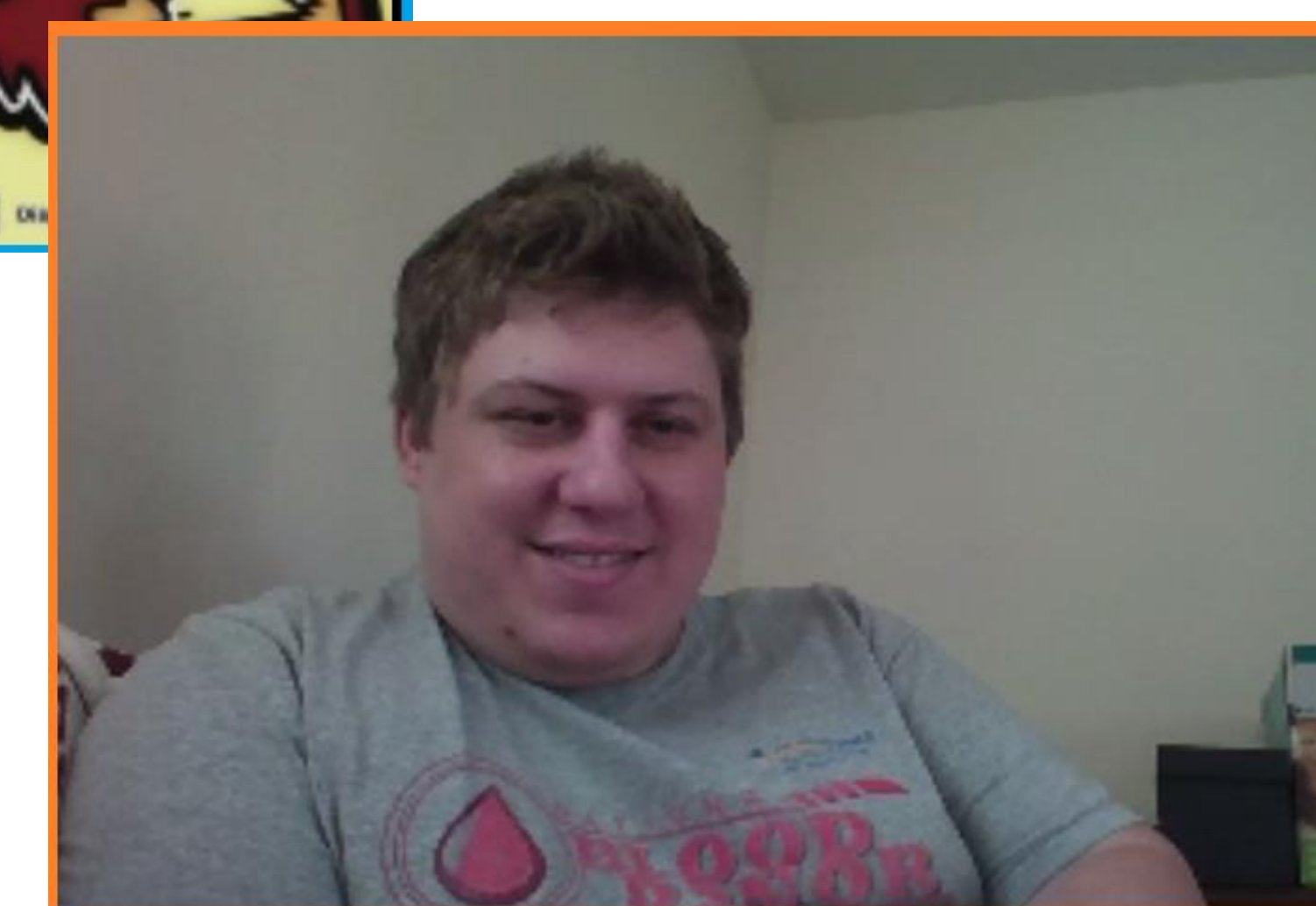


SPECTATOR EXPERIENCE



Gameplay stream with addition of emotion data

Spectator reaction to stream



Females found All the Feels more interesting than males

- 20% of the user base on Twitch is female. This tool could potentially increase female interest in streaming platforms
- Male participants said they were interested in the biometric data but did not feel more connected to the streamer
- Need for adding this emotional data to existing Twitch overlays
- Players were more expressive because they knew their emotions were being tracked
- Tool could be useful for stress regulation in games