# the social life of physiological signals

## A brief (preferably a single sentence each) statement of the student's research question and principal thesis

A lot of work looks at what biosensor data means to algorithms, but what do these data mean to people?

Through three studies, this dissertation examines how humans (rather than algorithms) encounter and interpret biosensor data in social contexts.

## A longer discussion of the student's principal thesis, including motivation and justification of importance

[drawing from hacking measurement talk here]

heartrate in apple watch has algorithmic meanings (Latvala, Kuja-Halkola, Almqvist, Larsson, & Lichtenstein, 2015) but im more interested in thumbkisses (McNell, 2015) what is it that allows this to work? what are the affordances of thumbkisses as opposed to just two circles where you're pressing ont he screen? (higher-resolution models of our bodies in everyday life).

heartrate sharing in everyday life (Slovák, Janssen, & Fitzpatrick, 2012) and how there are social meanings but how do they arise? are these meanings always positive?

stakeholders are designers + ppl who "buy" sensor readings.

## A discussion of the theoretical and/or empirical background area of the student's proposed dissertation, including analysis of relevant prior work

mediating interpersonal communciation with physiological sensors goes back to the days of ubicomp (Picard & Healey, 1997, Bell, Brooke, Churchill, & Paulos (2003))

"charisma" (Ames, 2015) of a particular sensing modality. . . . . heartrate has held particular allure for intimacy apps (Bell et al., 2003, J. H. Janssen, Bailenson, IJsselsteijn, & Westerink (2010), Slovák et al. (2012))

suggestability / moodlight. . . . . (Snyder et al., 2015). . . . . hype/"enchantment" particular to certain sensing modalities and devices. . . .(Ali, Lifshitz, & Raz, 2014)

social signalling. . . . . (Goffman & others, 1959, T Bergstrom & Karahalios (2009), Tony Bergstrom & Karahalios (2007), Kim, Chang, Holland, & Pentland (2008))

## A discussion of work already completed towards the student's proposed dissertation

coye study

indra

## A detailed discussion of proposed research methods and how they will address the research question

- lab study 1 (most purely behavioral)
- lab study 2 (takes a little broader view of social exchange)
- lab study 3 (most ecologically avlid)

## A proposed timeline for the student's proposed dissertation

- Spring 2016: study 2 + study 3
- June 2016: circulate chapter 1 + outline
- September 2017: circulate study-related chapters + updated outline
- December 2017: circulate complete first draft
- May 2017: file

## A detailed bibliography of relevant work.

Ali, S. S., Lifshitz, M., & Raz, A. (2014). Empirical neuroenchantment: From reading minds to thinking critically. *Frontiers in Human Neuroscience*, *8*. http://doi.org/10.3389/fnhum.2014.00357

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Goffman, E., & others. (1959). The presentation of self in everyday life.

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Slovák, P., Janssen, J., & Fitzpatrick, G. (2012). Understanding heart rate sharing: Towards unpacking physiosocial space. In (p. 859). ACM Press. http://doi.org/10.1145/2207676.2208526

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