
Designing Social Wearables for Mediation of Intimate Relationships

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Figure 1: Computational jewelry [7], a.k. digital jewellery [11]



Figure 2: Examples of intended users of computational jewelry[7]

Abstract

There are many benefits to mediating intimate relationships through technology, and an increasing number of ways of doing so. Among these, there is a growing interest in social wearables. But most of these devices are either bespoke one-off items or generalized and lack consideration for cultural context and needs of varied user groups. Overall, our understanding of the design criteria for these artifacts and potential implications of their newly-afforded multifaceted interactions is lagging far behind. My research aims to extend this knowledge by adopting multidisciplinary perspective and developing design guidelines with a focus on meaningful use of social wearables over time.

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Author Keywords

Computer-mediated communication; H2H; relationship; experience design; wearables; computational jewelry.

ACM Classification Keywords

H.5.m. Information interfaces and presentation: Miscellaneous.

Research Background

At the core of my research are people, their experiences, and *relationships mediated through technology*. These interests bring together several fields that concern themselves with *maintenance of intimate relationships*: Experience-Centered Design within Human Computer-Interaction (HCI) [2], Computational (a.k. Digital/ Smart) Jewelry Design [11, 7] Computer-Mediated Communication (CMC) [4, 12] and Relationship and Support Sciences that ground themselves in the Attachment Theory [1]. Echoing “analogue” cultural traditions [5], there is a growing interest in *communication between intimate dyads* mediated by *sentimental* digital artifacts (*wearable* and otherwise) [3]. But the field of *mediating intimate relationships through social wearables* is still young, and there are many unanswered questions.

Research Aim

The key question for me is how to design these wearable artifacts that could integrate relevance to specific user-groups, cultural context, expected utility



Figure 3: Connecting through technology concept [6]



Figure 4: Computational necklace for mediation of relationship [6]

and pleasurable user-experience geared towards meaningful long-term use.

Research to Date

Following an extensive literature review, I conducted a pilot study [6], examined current cultural context of sentimental jewelry [8] and advances in jewelry-like devices [7] and evaluated and expanded the existing *mediation strategies for mediation of intimate relationship through technology* [9, 10]. The key results suggest following: (a) types of dyads and attachment style of individuals affects what and how users communicate through *social wearables*; (b) mediation strategies currently used by HCI researchers [3] do not fully reflect user preferences and models from other research areas concerned with mediations of relationships; (c) use of sentimental jewelry is most prevalent among romantic partners as well as female friends and female relatives and these artifacts are rarely paired; (d) women are significantly more inclined to use sentimental objects and to wear jewelry.

Remaining Research Efforts

The initial part of research focused on clarifying high-level aspects of design for social wearables. Concluding this stage, I am examining the effects of form-factor of prototypes on user responses. In my forthcoming part of research, I aim to understand interactions within specific type of dyads. Using working prototypes with ambiguous non-verbal modalities, my objective is to identify how pairs develop symbolic language and what they choose to communicate through social wearables.

Expected Contributions

By the end of my PhD, I expect to establish trans-disciplinary design guidelines for development of *social*

wearables that *mediate intimate relationships*, as well as to make contributions to CMC and related fields.

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