Accomplishing Low-Attention Microtasks

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Abstract

In this position paper, we describe our approach and direction to address an important part of productivity through microtasks: the context of task completion. We focus on lowering the time and attention burden of microtasks through low-effort and peripheral contexts.

Author Keywords

Microtasking; low-effort crowdsourcing.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous

Introduction

Thoughtful microtasking allows easier recovery from interruption in pursuing work goals. To support the rhythm of a person's daily activities, the microtask should also be considered as an interruption itself, in relation to the activities around it. We have been considering microtasks as a minimally disruptive activity in the context of crowdsourcing, and believe this approach has value for microproductivity. Through incidental and low-effort tasks in periphery, microtasks can fill the spaces of a person's regular routine.

Low-effort Microtasks in the Periphery

In prior work [1], we observed a class of task in crowdsourcing called *incidental crowdsourcing*, which focuses on unobtrusive and non-critical contexts for the completion of work. Rather than being a central mechanic of a system, it exists in the periphery of other tasks, and the primary activity does not depend on the incidental microtask. In social network settings, this might include liking or flagging. The characteristics that we commonly see with these types of microtasks are worth exploring for microproductivity: they tend toward low granularity contributions, favor choice-based input, and usually enhance existing information. Designing toward these properties suggests a path for less burdensome microtasks in traditional goal-setting.

Where incidental crowdsourcing observes a type of microtask in the wild, we have more recently focused on new possibilities for microtasks through *low-effort crowdsourcing* [3]. Low-effort crowdsourcing focuses on low-attention tasks that may be completed using cognitive surplus during more mundane daily activities. Thus far, this space has been explored within three dimensions: 1) settings that involve waiting or allow multitasking; 2) microtasks that are designed for low time and attention commitment, and which enhance or even leverage the primary activity's experience; 3) input methods that account for situational and social restraints.

We have begun probing this space to with lucid prototypes, including a browser plugin that allows for microtask completion during web page loading, a tool that allows feedback on web content through parsing of facial reactions, and perhaps most provocatively, a tool to complete tasks using encoded grunts during a one-sided phone conversation [3]. Another example, Twitch [2], allows completion of short (i.e. two second or less) microtasks during the common activity of unlocking one's phone. The practical applications and possibilities are countless, and left to be explored.

A model of microproductivity that recognizes the relationship of microtasks to the activities around them encourages consideration of goals completed through reclaimed moments of a person's daily life. Our prior work in low-effort and incidental crowdsourcing will contribute to this conversation.

Brief Biography

Peter Organisciak is a Postdoctoral Researcher in UX at the HathiTrust Research Center. His research is on quality effects in crowd design and personalized crowdsourcing.

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