

Seeking participants for a study in understanding the workplace experience with sensors

We are seeking participants in state-of-the art research to understand workplace performance, health, and well-being through the use of unobtrusive sensors. This is part of an \$8.1 million IARPA funded project. The goal of our study is to use a range of sensors and biosensors to gain a deep understanding of real world work so as to develop models and methods that can ultimately reduce workload and stress and improve work performance and employee health and well-being.

In this study, participants will be asked to wear a wearable device and will use software on their mobile device to measure a wide variety of performance indicators. Individuals' data will be anonymized and aggregated to maintain privacy and *no content* will be collected or recorded. The study will take approximately three hours of participants' time in total spread out over the entire study period of two months. Participants will receive \$250 for successful participation.

Benefits for participation

The benefits for participation are substantial. Participants will learn factors that influence their workplace performance, stress, health and well-being. Participants will be part of cutting-edge research involving collaborations with top-tier university researchers.

Study Details

- Participation will be for two months starting mid-October.
- Each participant will receive payment of \$250.
- Each participant will be provided with a wearable device (Garmin Vivosmart) and 4 Bluetooth LE beacons (1 dot for a keychain, 1 dot for home, 1 dot at the desk, 1 dot in their backpack/briefcase).
- Participants will be asked to complete one-time a set of surveys on personality traits, sleep and health habits, stress, and job strain. This enables us to correlate sensor data with ground-truth measures.
- On a daily basis, participants will fill out short surveys, 1-3 minutes, to additionally serve as ground-truth assessments for daily measures.
- Participants will be asked to install several smartphone applications on their primary mobile device.
- Individuals may elect to drop out of the study at any time without penalty.
- Upon exit of the study, an individual may request to have all relevant information wiped from the study at no penalty to the user.
- ***Individuals may elect to opt-in or opt-out to certain portions*** subject to a minimum sensing suite.
- Remote and on-site support will be provided for those who need assistance.

The following instruments are provided through funding of the study:

- Garmin Vivosmart wearable device
- Smartphone agent (iOS, Android)

- Location, detection of whether someone is speaking without recording audio content and level of background noise - **no identification of speaker nor audio content will be recorded**; Proximity / context detection via location and nearby Bluetooth LE (BLE) beacons for detecting others and key locations
- Sensors for environmental data: temperature, pressure, ambient noise level, light levels.

Other data collection:

- Social Media (anonymized, for sentiment analysis)
- Infrequent probes lasting a few seconds (e.g. asking about mood) though such efforts will be strictly limited
- **The following Data collection is OPT-IN**
 - Logging laptop usage (for productivity, workload measures); Content **WILL NOT** be recorded, only time-stamps of applications in active use.
 - EMail, calendar (anonymized, only metadata, **NO CONTENT**)
 - Email will be header only - from, to, cc, bcc, subject length, body length, attachment number, attachment length
 - Calendar will include title length, location length, hashed location information, attendees, note length, dial-in information (present - yes or no)
 - Internal Social Media: Yammer, Slack - metadata / anonymized IDs
 - Eye tracking for mental workload measures

Mitre Corporation Testing and Evaluation teams will analyze anonymized privacy-preserved data streams to provide independent validation. These anonymized datasets are for internal use only and will not be made publicly available.

For further questions on how you can participate, please contact:

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