

# Making Sense of Emotion Sensing: Workshop on Quantifying Human Emotions

Call for Participation, UbiComp 2021  
<https://emosense2021.wordpress.com/>

## **Background**

The efficacy and validity of emotion-sensing have recently been called into question by prominent critiques by multiple researchers and authors. The aim of this workshop is to review the state of emotion-sensing, the range of valid applications of emotion-sensing, and critically examine its significance and interpretation from multiple perspectives. Organisers and participants from different disciplinary backgrounds will present a range of perspectives on emotion-sensing.

The ubiquitous computing community has long been at the forefront of developing, testing, and building user-facing systems that aim at quantifying human emotion. However, rather than targeting more accurate sensing algorithms, it is time to critically evaluate whether this goal is achievable and in what ways it could be beneficial for technologies to be able to detect user emotions.

In this workshop, we bring together experts from the fields of Ubiquitous Computing, Human-Computer Interaction, Psychology, and the Arts to - long-overdue - merge their expertise and ask the fundamental questions: how do we make sense of emotion sensing, can and should we quantify human emotions?

## **Themes:**

Quantifying Emotions: What does it mean to quantify emotion? Is it possible to detect emotions in data? Which sensing modalities are best suited to doing this? What are the risks of these approaches? What are issues of interpreting emotion sensing data?

Approaches to Detecting Emotion: How can we collect meaningful data? What novel approaches are out there?

The quest for an accurate ground-truth: A major issue of all research on emotions is the subjectivity of emotional states. How can we ensure that our ground-truth is reliable? Can we obtain ground-truth data that is comparable and generalizable?

Tools and Datasets: How reliable are available emotion detection systems, tools, and algorithms? What renders these feasible or non-feasible? Where are gaps for improvement? Are the gaps closing or is the goal in-principle impossible?

Application cases: What applications, technologies, and systems support the mental health of their users? Where are gaps and chances in those systems? What are concrete cases of systems that detect emotions? Where are emotion detection systems effectively used?

Risks of Misusing Quantified Emotions: Should researchers aim to achieve more accurate emotion detection? What are ethical and privacy concerns?

Mental Health and Emotion Regulation: What do we do once we have quantified emotions? How can we use technology to influence emotional trajectories, and create effective intervention systems that support emotional well-being?

## **Submission:**

We invite position papers that respond to the above-mentioned and related themes. We welcome a wide field of topics related to human emotion, emotion detection, and emotion regulation.

Submissions should use the ACM 'sigconf' template

(<https://www.acm.org/publications/proceedings-template>) and should not be longer than **8 pages including references**. All submissions will be peer-reviewed by a program committee.

All position papers shall be submitted to <https://new.precisionconference.com>.

After Login, please select: **Society:** *SIGCHI*, **Conference/Journal:** *UbiComp/ISWC 2021*, **Track:** *UbiComp/ISWC 2021 Workshop: Quantifying Human Emotions* from the dropdown menus in the submission tab.

## **Organizers:**

Benjamin Tag (University of Melbourne)

Sarah Webber (University of Melbourne)

Greg Wadley (University of Melbourne)

Vanessa Bartlett (University of Melbourne)

Jorge Goncalves (University of Melbourne)

Peter Koval (University of Melbourne)

Petr Slovak (King's College London)

Wally Smith (University of Melbourne)

Tom Hollenstein (Queen's University)

Anna Cox (University College London)

Vassilis Kostakos (University of Melbourne)

## **Further Information:**

<https://emosense2021.wordpress.com/>

If you have any questions, please feel free to contact us under [emosense21@gmail.com](mailto:emosense21@gmail.com).