

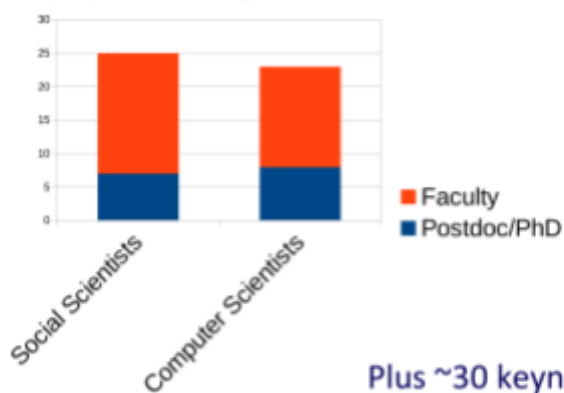
# Symposium on Interdisciplinary Insights into Group Dynamics



## Introduction

The Symposium on Interdisciplinary Insights into Group Dynamics was hosted at Delft University of Technology on Dec 5-6. The purpose was to bring researchers from computer science working in social signal processing and affective computing together with social science researchers who are interested in studying group dynamics. The Symposium took part in the recently built PULSE building on the TU Delft campus where the room was equipped for both lectures and break out discussions with whiteboards.

## Symposium Registrations : 48



Plus ~30 keynote registrations

Symposium on Interdisciplinary Insights into Group Dynamics 2018

*Statistics of Symposium attendees based on discipline and seniority. Actual values may vary due to last minute attendee replacements and cancellations*

The activities of the symposium were advertised on our symposium webpage<sup>1</sup> hosted at the TU Delft. Researchers were invited from both disciplines. We had budgeted for around 50 participants including speakers and organisers. Registration sold out in a few days. To allow for more people to attend the keynotes, we opened up registrations for just the keynotes, which led to an additional 30 registrations from MSc and PhD students. Illustration 2 shows the distribution of faculty and non-faculty from either discipline present at the Symposium. Aside from participants coming from the Netherlands, we also had registrations coming from Portugal, Austria, Germany, France, Italy, and Belgium. This indicates that there is a strong and emerging community who is interested in working together on this topic.

## **Symposium Format**

To encourage interdisciplinary discussions, the Symposium involved six keynote speaker sessions, interspersed with interactive sessions.

The keynote speakers were carefully chosen to provide a balance between these two disciplines; three group scholars (Steve Kozlowski, Michigan State University; Matt Cronin, George Mason University; Michaela Kolbe, Zurich University Hospital), and three computer scientists (Justine Cassell<sup>2</sup>, Carnegie Mellon University; Hatice Gunes, Cambridge University; Jean-Marc Odobez, Idiap Research Institute). The invited talks provided an excellent basis for interdisciplinary discussions. For example, Matt Cronin's talk on representational gaps (i.e., misunderstandings during communication that are not easily identifiable until a conflict occurs due to this misunderstanding) paved the way for enhanced interdisciplinary understanding.

Aside from the balanced set of keynotes, we reserved plenty of time for interdisciplinary discussions through plenary brainstorming sessions, break out sessions and plenary reporting back. All discussions were recorded in a common google drive.

On the first day, we used a bottom-up approach, asking participants about pertinent issues that they would want to address, to determine discussion topics. These included the following:

Intergroup Interaction Processes

Conceptualizing Dynamics

Sharing Data and a Interdisciplinary Glossary

Social Sensing methods and bio-signals

Interestingly, although all these topics were quite different, during the plenary report back, similar themes came up from all break out groups regarding how to conceptualize the

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<sup>1</sup> <http://geeksgroupies.ewi.tudelft.nl/>

<sup>2</sup> Due to sickness, the first keynote speaker, Justine Cassell cancelled at the last minute and Hayley Hung gave an emergency keynote in her place to help set the scene for the rest of the conference.

measurement of group dynamics and also how to meaningfully use social sensing technology for capturing relevant group phenomena.

On the second day, discussions focussed more on trying to understand each other better. For instance, in one group, the term “annotation” was described and discussed for over 40 minutes. This and other examples highlighted the need to build a dictionary to help translate concepts from social science to computer science (and vice versa) in order to reduce the chance of representational gaps in future conversations.

While the overall organization of the Symposium was similar to the earlier Lorentz Workshop on Interdisciplinary Insights into Group and Team Dynamics held in 2016, the shorter symposium format made it difficult to gain mutual understanding quickly enough. The larger proportion of non-faculty and particularly early stage PhD students also led to a different dynamic in the Symposium, compared to the earlier, smaller Lorentz workshop. It was noted by some of the senior researchers who had also participated in the Lorentz workshop two years ago that some aspects of the discussion did feel somewhat repetitive in terms of clarifications with respect to disciplinary jargon. However, while there was indeed some circling back to old discussions, some topics were revisited from a fresh perspective given the different participants, which either served to highlight existing issues that had been mentioned before, introduce a different field of application, or to give extra nuance to existing knowledge.

Besides the formal sessions, there were frequent breaks as well as a shared dinner to allow participant to getting to know each other better and exchange details concerning personal research interests and collaboration needs/opportunities.

## **The Outcomes**

The feedback from the Symposium participants was overwhelmingly positive. Concrete plans for collaboration tended to focus more on individual interdisciplinary connections. In addition to these, concrete action points are the following:

- Building a repository to support collaborative research initiatives, containing:
  - a report of what participants are looking for and what they could be offering others as a way to facilitate access to collaborators for research initiatives.
  - a dictionary of disciplinary terms explained for the other disciplines to close representational gaps and enable interdisciplinary understanding e.g., what do our labels such as “annotation” mean? (coding); what is “ground truth” (criterion).
  - tutorials for researchers to guide social scientists on how to collect data that could be easier to process for automated behaviour analysis.
  - Possible venues to publish collaborative work. This includes a special issue at the Organization Psychology Research Journal for which Matt Cronin is one of

the editors.

- Organising of an interdisciplinary panel/workshop at the INGRoup conference in Lisbon in 2019
- Organising of an interdisciplinary workshop at the ACM International Conference on Multimodal interaction in Utrecht in 2020
- The possibility of organising a Dagstuhl Seminar in the coming years was also discussed.