Novel and Emerging Test Methods and Metrics for Effective HRI

11 March, 2022

10:00 EST – 17:15 EST

08:00 – 15:00 MST

15:00 – 22:15 GMT

00:00 – 07:15 JST (12 March, 2022)

Abbreviated Schedule (EST, GMT-4)

10:00 - Opening introductions
10:15 - Invited talk, Dr. Julie Marble
11:00 - Optional Discussion / Short break
11:15 - Breakout session 1
11:45 - Invited talk, Dr. Elizabeth Phillips
12:30 - Long break
13:30 - Paper session 1
14:15 - Optional Discussion / Short break
14:30 - Invited talk, Dr. Stefanos Nikolaidis
15:15 - Optional Discussion / Short break
15:30 - Paper session 2
16:15 - Optional Discussion / Short break
16:30 - ARM Metrics & Evaluation Working Group, Adam Norton
16:45 - Breakout session 2 & Closing discussions
17:15 - Adjourn

Housekeeping

- We recommend using headsets to reduce the amount of echo, background noise, and audio feedback.
- Please mute your microphones when not engaged in the conversation, especially if when there is background noise.
- While we do have regular breaks scheduled, please feel free to eat and drink during the workshop. Just remember to mute your microphones.
- The same goes for bio breaks. And we strongly recommend you do not take your electronic devices (particularly Bluetooth headphones!) with you. 😊


ONE DOES NOT SIMPLY
SAY THANK YOU WITHOUT A MEME
memes.com

IEEE/ACM HRI Workshop Series

- 2019: Daegu, Korea
  Metrics and test methods in HRI research
- 2020: Cambridge, United Kingdom (virtual)
  Repeatability and reproducibility in HRI Studies
- 2021: Boulder, United States (virtual)
  Novel and emerging metrology for HRI
- 2022: Sapporo, Japan (virtual)
  Test methods & metrics for effective HRI

IEEE Standards for HRI

- P3107: Human-Robot Interaction Terminology

  The purpose of this standard is to establish and define a **common terminology** for practitioners and users of human-robot interaction (HRI) technologies. This standard is intended to address issues common within the field of HRI, particularly surrounding the use of inconsistent and/or conflicting terms and definitions.

- P3108: Recommended Practice for HRI Design of Human Subject Studies

  This recommended practice outlines best practices and requirements for the development of designs of human-subject experiments in human-robot interaction research. It also provides best practices and requirements for designing and executing human-subject studies in human-robot interaction (HRI) research. It is particularly aimed at providing guidance for emerging researchers in the associated fields of HRI, as well as establishing a baseline methodology that supports replicability in HRI research

- Join our Slack:
  - https://join.slack.com/t/hri-standards/shared_invite/zt-wovcar3k-Lye8p71x1amdSYgR0MH5bg
- Join the Listserv:
  - P3107: https://listserv.ieee.org/cgi-bin/wa?SUBED1=STDS-P3107
  - P3108: https://listserv.ieee.org/cgi-bin/wa?SUBED1=STDS-P3108

Dr. Julie Marble

Northeastern University

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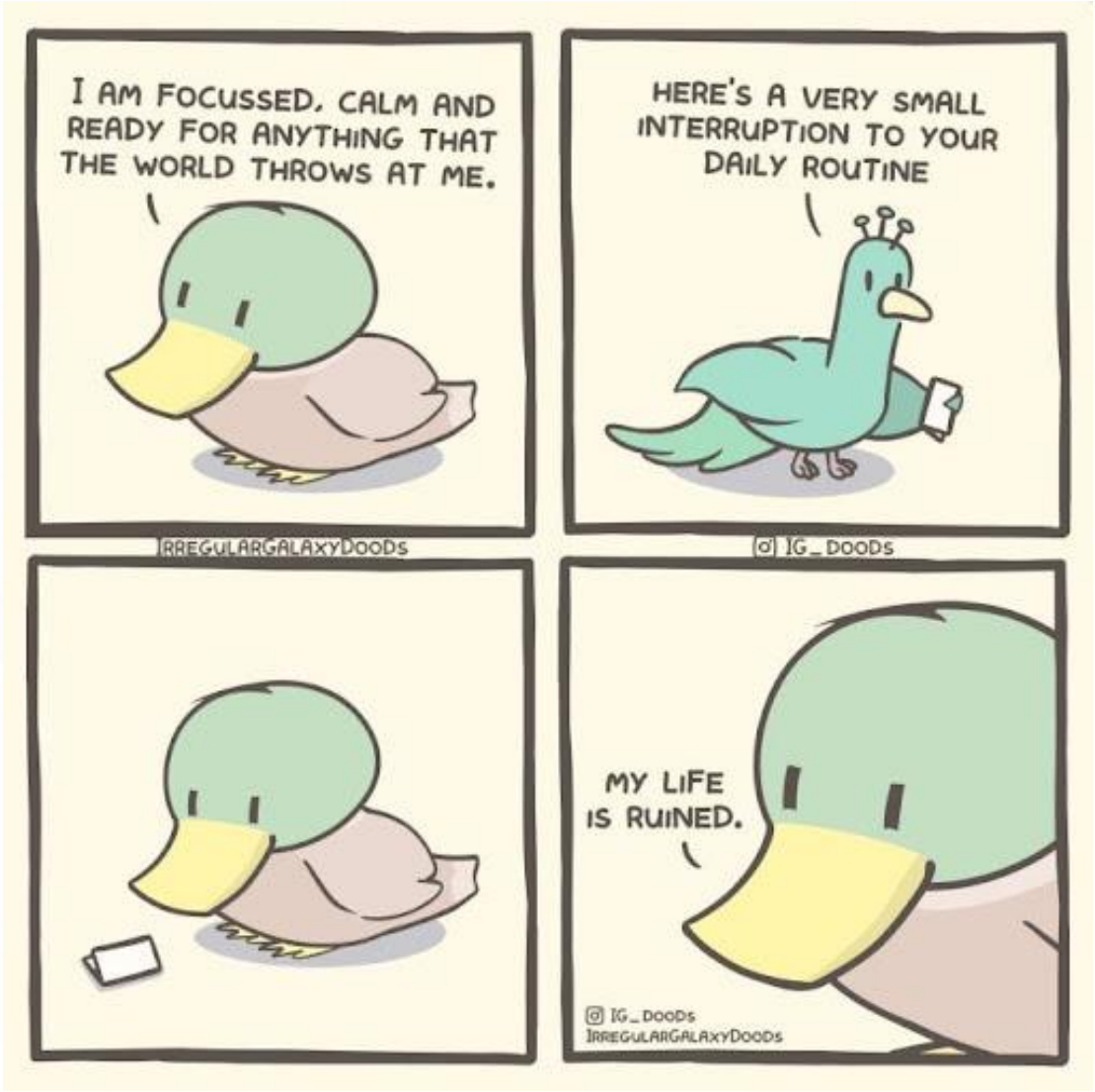
Breakout Session 1



Dr. Elizabeth Phillips

George Mason University

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Competition as a design method to develop and evaluate ethical robots
Jimin Rhim and AJung Moon *(McGill University)*

On the Importance of Environments in Human-Robot Coordination
Matthew C. Fontaine, Ya-Chuan Hsu, Yulun Zhang,
Bryon Tjanaka, and Stefanos Nikolaidis *(University of Southern California)*

Multimodal Bio-Behavioral Approaches to Study Trust in Human-Robot Collaboration
Aakash Yadav, Sarah K. Hopko,
Yinsu Zhang, and Ranjana K. Mehta (Texas A&M University)

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Dr. Stefanos Nikolaidis

University of Southern California

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Characterizing Task Relevant Human Behavior Using a Model Free Metric

Michael Lewis[1], Katia Sycara[2], Dana Hughes[2], Huao Li[1], and Tianwei Ni[2]

([1]University of Pittsburgh, [2]Carnegie Mellon University)

Measuring Intention to Use in HRI - A Parsimonious Model

Ruben Huertas-Garcia[1], Santiago Forgas-Coll[1], Antonio Andriella[2], Guillem Alenyà[2]

([1]University of Barcelona, [2]Universitat Politècnica De Catalunya)

Formalizing HRI Data Collection: A Case Study

Zhao Han and Tom Williams (Colorado School of Mines)

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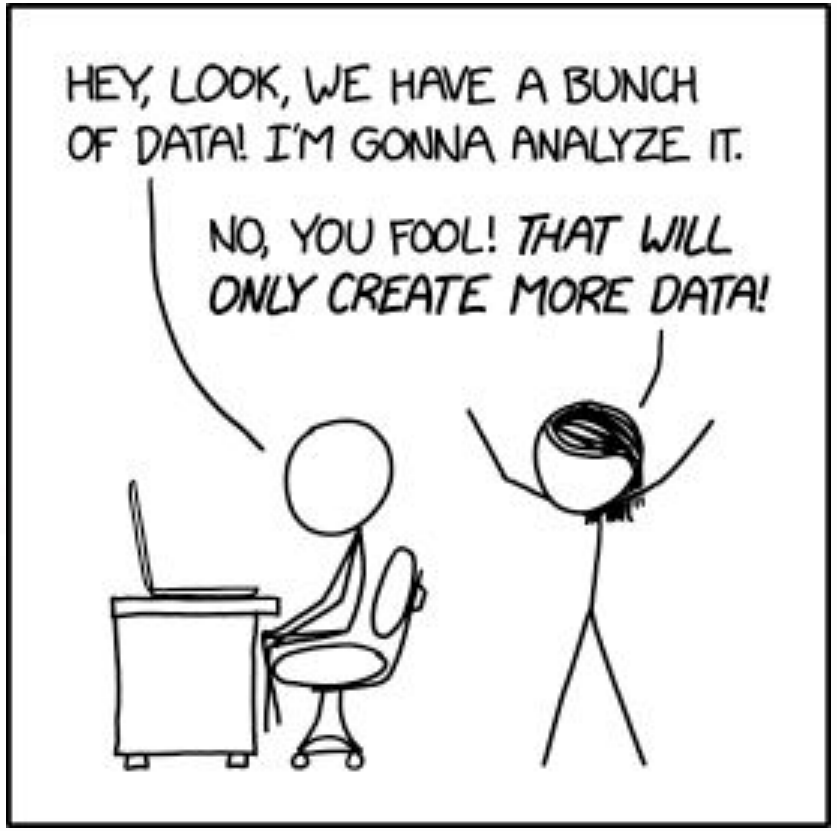
Adam Norton

University of Massachusetts, Lowell
ARM Metrics and Evaluations Working Group

Breakout Session 2



Adjourn