### International Autumn School on

# **Situation Awareness in Cognitive Technologies 2022**

# Theory and Application

# https://www.ise.ufl.edu/ichms2022/autumn-school-2022/

# http://isact.cogsy.de

### **Organisers**

Dr. Soumick Chatterjee OVGU Magdeburg

Rupali Khatun Erlangen University Hospital

Erasmo Purificato OVGU Magdeburg

Prof. Dr. Andreas Nürnberger OVGU Magdeburg

#### Venue

**Orlando, Florida, USA** (in conjunction with the ICHMS 2022)

### Scope

We are pleased to announce that the International Autumn School on Situation Awareness in Cognitive Technologies (ISACT 2022) will be held from November 16 to 19, 2022 in Orlando, Florida, USA, in a hybrid fashion, in conjunction with the IEEE International Conference on Human-Machine Systems (ICHMS 2022).

Situation Awareness in Cognitive Technologies is a trending research direction that gained a lot of interest from the industry in recent years. Situation awareness is the key to providing the best possible user experience and supplying the user with the most relevant content - by establishing a grounded assessment of interactions, actions, etc., based on the environmental elements and corresponding events. With the astonishing development of the field of machine learning, especially of deep learning, one of the important aspects of the situation awareness of the machine learning models is by means of explainability. Therefore, this autumn school this autumn aims to present the fundamental aspects of situation awareness in cognitive technologies, which can be discussed in an interdisciplinary context, and will mainly be focusing on Human-Computer Interaction (HCI), Brain-Computer Interface (BCI) and Explainable AI (XAI). Going with the theme of this year's ICHMS 2022, the school will also be focusing on the topic of "human-autonomy teaming" in different areas – robotics, industry 4.0, autonomous driving, even medicine. To make this school an interactive learning experience, we would encourage the participants to share their research presentations (posters) related to the above-mentioned topics.

This year's edition intends to bring together academia and industry to provide a large practical perspective to undergraduate and graduate (including early-stage PhD) students, as well as to young industry personnel. Attendees will be able to extend their knowledge in both theoretical and practical aspects of:

- Situation Awareness
- Brain-Computer Interaction
- Human-Computer Interaction
- Explainable AI

The International Autumn School on Situation Awareness in Cognitive Technologies 2022 will be held from November 16 to 19, 2022 in Orlando, FL, USA, in conjunction with the IEEE International Conference on Human-Machine Systems (ICHMS 2022). It is going to be a great opportunity to learn about new technologies, meet fellow students/employees, discuss ideas with experts, participate in an international conference and simply have a splendid time in the city of Orlando!

# **Important Dates**

Registration Deadline: October 30th, 2022

Application Deadline For Travel Grants: October 20th, 2022

Autumn School Date: November 16-19, 2022

# Autumn School Program (tentative, further details on the website):

Day 1 Situation Awareness

Day 2 Brain-Computer Interaction and Day 3 Human Computer Interaction

Day 4 Explainable AI

# **Registration and Participation:**

Early-bird registration for in-person attendance at the autumn school is possible till the deadline of 30th October, with a registration fee of USD 250, afterwards it will be USD 310.

Register now: https://cvent.me/2gXDN1

We are also offering travel grants for students applying for the autumn school. Application deadline for the same is October 20th, 2022. Apply now: <a href="https://forms.office.com/r/CWFBbmx2Dt">https://forms.office.com/r/CWFBbmx2Dt</a>

It will also be possible to join online. For registration as an online participant or for any other queries, please contact Erasmo Purificato (Email: <a href="mailto:erasmo.purificato@ovgu.de">erasmo.purificato@ovgu.de</a>)

### Organised and Supported by

