

Proposal for pre-conference workshop – AGILE 2017 Wageningen, Tuesday 9 May 2017

<http://www.agile-online.org/index.php/conference/conference-2017>

1. Workshop name/title (and acronym is applicable)

Spatial thinking: research, educational, and societal aspects

2. Description of the workshop by listing topic(s), objective(s) and planned outcome(s)

2.1 Topic(s)

The Workshop will focus on all aspects of spatial thinking. Indicative topics include:

- cognitive approaches to spatial thinking
- educational approaches for the enhancement and evaluation of spatial thinking skills
- innovative tools to support the enhancement of spatial thinking
- spatial thinking and inclusive education

2.2 Objective(s)

The main objectives of the proposed Workshop are:

- to present state-of-the-art educational approaches and technological tools that enhance spatial thinking skills
- to stimulate fruitful discussions and provide insights on the research questions that relate to spatial skills, how spatial thinking can be enhanced in inclusive educational contexts, and to what extent the level of spatial awareness influences societal activities.

2.3 Planned outcome(s)

An outcome can be e.g. the publication of a report, a special issue of an International Journal, a white paper, a book, etc. If you already know the publisher, please provide this information as well.

The Workshop organizers, depending on the number and quality of contributions, will explore the possibility of publishing either a white paper with the workshop's results or on-line proceedings

3. Abstract

This is how you want your workshop to be presented on the conference webpages (maximum 1000 characters)

Spatial thinking is a blending of knowledge and skills with rewarding effects on STEM disciplines, social sciences and humanities, as well as everyday life. It is the subject of interdisciplinary research from Psychology, Geography, GIScience, Geosciences, Education, Informatics, Neuroscience, etc. The Workshop aims at bringing together scientists: (a) to present innovative educational approaches, existing research projects and technological tools to support spatial thinking development and (b) to discuss emerging research questions relating to the enhancement of spatial thinking, its integration in education and its contribution in critical educational and societal issues, such as inclusive education and gender equality. The workshop is organized under the umbrella of AGILE's Special Interest Group on Geospatial Thinking, which aims at coordinating and disseminating research efforts to enhance spatial thinking through education and evaluating the level of spatial awareness in societal activities.

4. Short description of the intended length (half or full day) and the format of the workshop

We consider a half day length appropriate for the workshop. The workshop will be organized in a dynamic and interactive manner. The first part will be devoted to the presentation of newest achievements in the domain, both in terms of theoretical approaches and demos of innovative applications. The second part of the Workshop will foster discussions on future research directions.

5. Brief statement of the relevance of the workshop for AGILE

The proposed Workshop deals with a critical research issue for GIScience education and training. It is also the subject of the AGILE Special Interest Group on Geospatial Thinking (<https://agile-online.org/index.php/news/262-agile-special-interest-group-on-geospatial-thinking>).

6. What is the approximate number of expected participants?

Approximately 10-15 participants.

7. Names and e-mail addresses of the organizing member(s)

Leading AGILE member (or sponsor) and contact person:

National Technical University of Athens

Contact person: Marinos Kavouras (mkav@mail.ntua.gr)

Contributing AGILE members (including the persons involved) – at least one seconding AGILE member is needed:

Contributing non-AGILE members (including the persons involved) – if applicable:

Organizing Committee (if applicable):

Programme Committee (if applicable):

8. Additional information about previous workshops, if held.

The Workshop is proposed as a continuation of the first Workshop on geospatial thinking, which was organized during AGILE 2015 (<http://portal.opendiscovery.space.eu/event/geothnk-workshop-inside-agile-conference-2015-831812>). The Workshop was marked with success, since it attracted important contributions from prominent scientists from Europe and USA.

Another Workshop on “Teaching Spatial Thinking from Interdisciplinary Perspectives” was organized during COSIT 2015 (<http://ceur-ws.org/Vol-1557/>) which focused on the interdisciplinary character of spatial thinking and the need to address this ability from multiple perspectives.

9. Expected resources needed

Explain here if you have any special needs (e.g. internet connection, break-out room(s), etc.), what are the expected resources needed. Please take into account that the fee for the workshop (1 day) is fixed at 50€ and this should cover the basic expenses made (coffee breaks, ...). If you need additional support, this request should be directed towards the AGILE Council, but this support cannot be guaranteed.

- Internet connection
- Projector

10. Other information

Submission by e-mail to: Agile2017@wur.nl