

52°North Student Innovation Challenge 2017

Bridging IoT and Sensor Web Applications

Innovation is a driving force for the development of our economy. It is based on new, creative ideas, on applicable and implementable concepts and on generating new technologies and applications. However, a novel idea becomes an innovation only if it meets societal demands and unfolds its use in practice. It must address a certain market niche, i.e. have market relevance, or help e.g. a particular organization to improve its business.

With this in mind, the 52°North Student Innovation Challenge stimulates students to generate and implement innovative ideas and concepts for a specific topic in the GeolT domain. The challenge acknowledges and rewards creative and innovative minds.

This year's student innovation challenge addresses the topic of exploring the link between IoT and Sensor Web technology. Potential projects comprise:

- IoT clients for feeding data from sensors into Sensor Web infrastructures
- Processing and analysis of observation streams (event streams)
- Integration of heterogeneous IoT data sources by means of Sensor Web and Semantic Web technologies

52°North invites students of Geoinformatics, Informatics or related fields to submit a proposal which outlines the project idea, emphasizes its innovative quality and convincingly describes its feasibility, practical use and market relevance, as well as expected outcome. The top three proposals are then invited to implement a proof-of-concept. In the case of successful completion of the projects (including a proof-of-concept) the following awards will be granted:

- 1st prize: 2000,- EUR
- 2nd prize: 1000,- EUR
- 3rd prize: 500,- EUR

The winners will present their project results at the Geospatial Sensor Webs Conference 2017. They can also receive reimbursement of travel costs up to 1000,- EUR.

Applications must be submitted no later than May 7, 2017, via email to

52°North Initiative

Ms. Ann Hitchcock

52nprize@52north.org

The innovation prize is sponsored by 52°North GmbH, con terra GmbH, ESRI Deutschland GmbH, the Institute for Geoinformatics at the University of Muenster and the Faculty of Geo-Information Science and Earth Observation (ITC) of the University of Twente. These institutions work together under the banner of the 52°North Open Source Initiative to promote research and education in the field of Geoinformatics. A central part of 52°North's activities is the constant exchange of research ideas and innovative developments between academia and business. Based in Muenster, the 52°North Initiative possesses a level of potential which is unique throughout Europe when it comes to the development of innovative solutions in the field of geoinformation as a whole, as well as in its constituent applications.

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Guidelines

Focus

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- IoT clients for feeding data from sensors into Sensor Web infrastructures
- Processing and analysis of observation streams (event streams)
- Integration of heterogeneous IoT data sources by means of Sensor Web and Semantic Web technologies

Who can apply?

The applicant must be enrolled as a BSc, an MSc, Diploma or PhD student.

The Application

The application comprises

1. A written proposal
2. A written, signed declaration
3. A tabular CV

All application documents must be submitted in digital form per email to 52nprize@52north.org.

The proposal

The challenge is to compose a project proposal and implement a proof of concept which addresses bridging IoT and Sensor Web applications. The proposal should be a maximum of 5 pages (2500 words) and written in English. The following criteria apply. It must:

- provide a description of the innovation idea/concept
- describe the project goals
- emphasize its innovative quality, practical feasibility and market relevance
- outline a proposed solution – technical approach & feasibility
- include a work plan/road map/implementation plan
- describe the expected outcomes (implementation).

Expected outcome/results

- running, tested and documented software
 - well-documented source code available in a public Git repository
- project documentation
 - blog posts
 - project report
 - any documentation needed for running and using the software

Important dates

- Application deadline: May 7, 2017
- Notification of selected proposals: May 15, 2017
- Coding start: June 1, 2107
- Coding end, submission of final project results: July 31, 2017
- Award ceremony at the Geospatial Sensor Webs Conference: August, 29, 2017