

20 WEBVALLEY 2022 participants selected

June 7, 2022

The FBK summer camp dedicated to data science is back

With great pleasure this year, after 2 online events, WebValley is being held in person, hosted at the Istituto Artigianelli **July 17 through August 6**. The 2022 edition is dedicated to the **application of data science and artificial intelligence tools in the field of air quality monitoring**, in collaboration with the “[Sensors & Devices](#)” and “[Digital Health & Wellbeing](#)” Centers (Data Science for Health unit) at Fondazione Bruno Kessler and also supported by the European [IPCEI Microelectronics](#) project with a view to bringing new generations closer to micro- and nano-technologies.

The [Webvalley 2022 team](#), selected from the 64 applications received, consists of **7 participants from Trentino, 7 from other Italian regions (Veneto, Friuli, Toscana, Lazio) and 6 from other countries (2 from the United States, 1 from Brazil, 1 from Australia, 1 from Israel and 1 from Norway)**.



Atlanta, May 10, 2022: the awarding of the 6 selected finalists of the Regeneron ISEF Prize

In particular, the WebValley 2022 Team will be involved in the development, implementation and validation of artificial intelligence algorithms aimed at monitoring pollutants through the development of datasets collected from innovative sensors, produced by FBK research in the field of micro- and nano-technologies. These technologies open up the possibility of monitoring pollution in a “widespread and real-time” manner, as requested by the European Parliament with the resolution of 13 March 2019 entitled “A Europe that protects: Clean air for all”.

This program intends to support the growth of a community that uses new technologies responsibly and that is active in proposing virtuous behavior and consumption models. To this end, during the three weeks there will be meetings with researchers and professionals working in this field.

Given the environmental issue, the **Provincial Agency for Environmental Protection of the Autonomous Province of Trento** ([APPA](#)) was involved, which will propose to the participants a visit to a monitoring station and a number of training actions, contextualizing the research question to the local situation.

In addition to FBK and APPA researchers, the team will be supported by researchers from the University of Trento and Ferrara, the University of Bristol, as well as top internationally renowned researchers for air quality monitoring from the laboratory of Professor [Francesca Dominici](#) with the **Harvard T.H. Chan School of Public Health**.

Alfredo Maglione, [UPSens](#), will provide the point of view of those who, starting from research results in the field of air quality, decided to enhance them on the commercial front by starting innovative startups.

Since this is a data science camp, the team will delve into the use of the computational tools needed to analyze and make sense from data, namely data science and machine/deep learning solutions and high-quality collaborative software made by the participants themselves, all after receiving the necessary domain knowledge and useful and effective operational, communication and organizational tools.

As usual by now, Webvalley will be supported by a team of teachers from the [Istituto Artigianelli](#) in the teaching methodology based on design thinking. Informal opportunities for conversation, communication, discussion, recap and socialization will be institutionalized and structured through sports and organized leisure.

In addition, space will be reserved for scientific communication: the school program includes in fact a scientific communication module, by the [Arditodesìo](#) Association of Trento, while a team of Artigianelli students will set up a Communication Office for the school.

As a partner of the initiative, Microsoft will provide MS Teams' tools for video conferencing, teamwork and document sharepoints as well as cloud computing tools on the Microsoft Azure platform for scientific analysis and project development.

The initiative takes place under the patronage of the Autonomous Province of Trento.

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