Sustainability Data Science Challenge
Factsheet

Capgemini, Microsoft and ÖBAG organize the Sustainability Data Science Challenge 2021 in partnership with four of Austria's leading companies. The challenge has the objective to contribute to a sustainable future for Austria.

What is the Sustainability Data Science Challenge?

The Sustainability Data Science Challenge is a competition with the objective to solve a specific, sustainability related problem using Artificial Intelligence.

Participating Teams use big data to develop a data science model to solve the respective problem, determined by the selected partners. The submitted models are evaluated based on a criteria catalogue and the team with the best solution is awarded with a prize of € 5.000.

Which problem is handled by the challenge?

The Data Science Challenge seeks to determine the carbon footprint, assess the biodiversity and identify potential of sustainable energy sources (solar, photovoltaic) of selected properties of participating companies. To solve this task satellite pictures are analysed using data science models.

data science model: A computer-vision model is developed by the participants, which labels specific objects on satellite pictures (manufacturing plants, office buildings, parking lots, green fields etc.). By using zoning plans, the boarders of the individual properties are determined so that specific objects can be clustered to the companies' properties.

carbon footprint & biodiversity: Based on standardized emission values and biodiversity indices, the carbon footprint and biodiversity is calculated for individual properties.

sustainable energy: using weather data and requirements of solar/ photovoltaik panels, the potential of sustainable energy is calculated per property. The resulting value is compared to the property's energy consumption.

Who can participate in the challenge?

Participants can enter the challenge either individually or as a team of up to four members. Participants can come from either of two groups :

    (1) Bachelor-/Masterstudents with data science expertise
    (2) Junior- and Senior-Data Scientists

Participants must be aged 18 or older. Registered participants are evaluated for their eligibility to participate.

What is in it for you?

You boost your expertise and experience by exchanging views with other participants and you receive expert-trainings on data science and cloud computing. The winning team finally presents the results to top management of the partner companies and organizers and thus showcases its competencies.

Capgemini · Microsoft · ÖBAG

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A1 Telekom Austria Group · BIG Bundes Immobilien Gesellschaft · Verbund

Overview

Duration of the Challenge
04.10.2021 – 14.11.2021

Technical Environment
Microsoft Azure

Participants
Bachelor/Master-Students
Data Science Professionals

Organizers
Capgemini
Microsoft
ÖBAG

Partners
A1 Telekom Austria Group
BIG
Österreichische Post
VERBUND

Registration Deadline
01.10.2021

Register here!