



## **GREEN TECHNOLOGIES IN ARCHITECTURE, ENGINEERING & CONSTRUCTION**

TUM Science Hack - TUM: Junge Akademie – June 24-26, 2022 – Munich, Germany

# Challenge Definition



## **Vision:**

'Building A New Reality' is only possible if we build on new ideas. Green architecture and construction are an essential strategy to address the shortage of resources. It is the path to go for a sustainable and healthy living environment. Plants are already the key component to make cities enjoyable - but they can do more. Integrating them as structural elements in buildings means integrating nature in our life. Let's convert buildings into living buildings.

## **Task:**

Develop a vision how a digital twin of growing plants supports the vision of living buildings. Think about data driven architecture and construction for a successful deployment. Are historical data necessary or the collection of information in real time - just envision new ideas.

## **Support:**

Altair will provide first class development tools for data management, IoT, dashboarding, control design, engineering and much more. We will support you with our deep understanding of lightweight design, electric driveline optimization and data science.

## **Skills:**

- Architecture and Civil or Mechanical Engineering, Computational Science or Informatics
- Business Management, Marketing
- Team player, well organized - customer centric thinking