Sustainable eco-façade applications through eco-didactic engagements in urban space

Negar Rahimi, Burcu Olgen



Rapidly advancing **ecological crises** entails the distribution of **informing the public** on environmental issues and sustainability to **spread awareness** and **encourage action**.

Public space is among the most **impactful** environments which have the potential to create **community dialogues** on **ecological concerns.**

Urban spaces can be used as a canvas to inform society about the environment and increase attraction to built environment.



Public eco-art is one of the art mediums that creatively use the public space to deliver **ecological messages**. Ecoart shapes the public space to potentially become an **ecodidactic environment**; which is a space that creates **dialogues** on the **environment** and **sustainability**.

On the other hand, **digital technologies** are getting more involved in the art world and in daily life, creating opportunities for **different ways of communication**. Such as **interactive experiences** proven by studies, which could **increase the eco-message's impact**.

Artificial Intelligence (AI) is one of these technologies that provides real-time data, image recognition, machine learning, and has a great potential to design interactive engagements.

Image references:

Digital artworks: New media artist Roelof Knol

Parametric structures: Anonymous

For more information and questions:

Negar Rahimi: negarsadat.rahimi@mail.concordia.ca

Burcu Olgen: burcu.olgen@mail.concordia.ca

Besides the benefits, these technologies consume extensive energy to operate; still, their utilization is inevitable. The study aims to increase sustainability awareness by developing an interactive eco-didactic installation utilizing AI technologies, parametric structure, and sustainable and energy-efficient solutions.

Supervisor: Carmela Cucuzzella, PhD

Ceasbe Concordia University Research Chair Integrated Design Ecology and Sustainability for the Built Environment