

## EMISSION CONTROL AND LOGISTICS OPTIMIZATION FOR GREEN INFRASTRUCTURE CONSTRUCTION

We aim to make the Dutch construction logistics sector more sustainable, resilient and safe by leveraging advanced IoT, AI, and real-time Carbon Digital Twin technologies.

My focus within the ECOLOGIC project is to explore how specific construction site disruptions can impact emissions during key operations. By using simulation and architectural modeling, I aim to better understand these effects and support future steps toward more sustainable, efficient construction sites.

Fatemeh Massah

Within the ECOLOGIC project, I am focusing on multi-modal data processing. Using a drone, cameras, and sensors, I will gather data to measure gas emissions, assess flora and fauna diversity, and optimize waste management and recycling. After implementing these use cases, I will also develop an interactive dashboard.

Arda Satıcı

To offer a different perspective on ECOLOGIC, I will concentrate on occupational health and safety. My goal is to reduce work-related accidents and illness statistics by utilizing wearable and environmental sensors and combining them with machine learning techniques.

Egemen İşgüder



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