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ALUNOS ♦ EMPRESAS

Nazanin Azimi Fereidani

Master's degree in Architecture

Second Year PhD Student

Main research interests:

Climate Change

Buildings' Energy Performance

Mitigation and Adaptation strategies

A decision-making tool for the renovation of buildings in Middle East coastal cities under future climate scenarios

Supervisors:

Professor Adélio R. Gaspar

Professor Eugénio Rodrigues

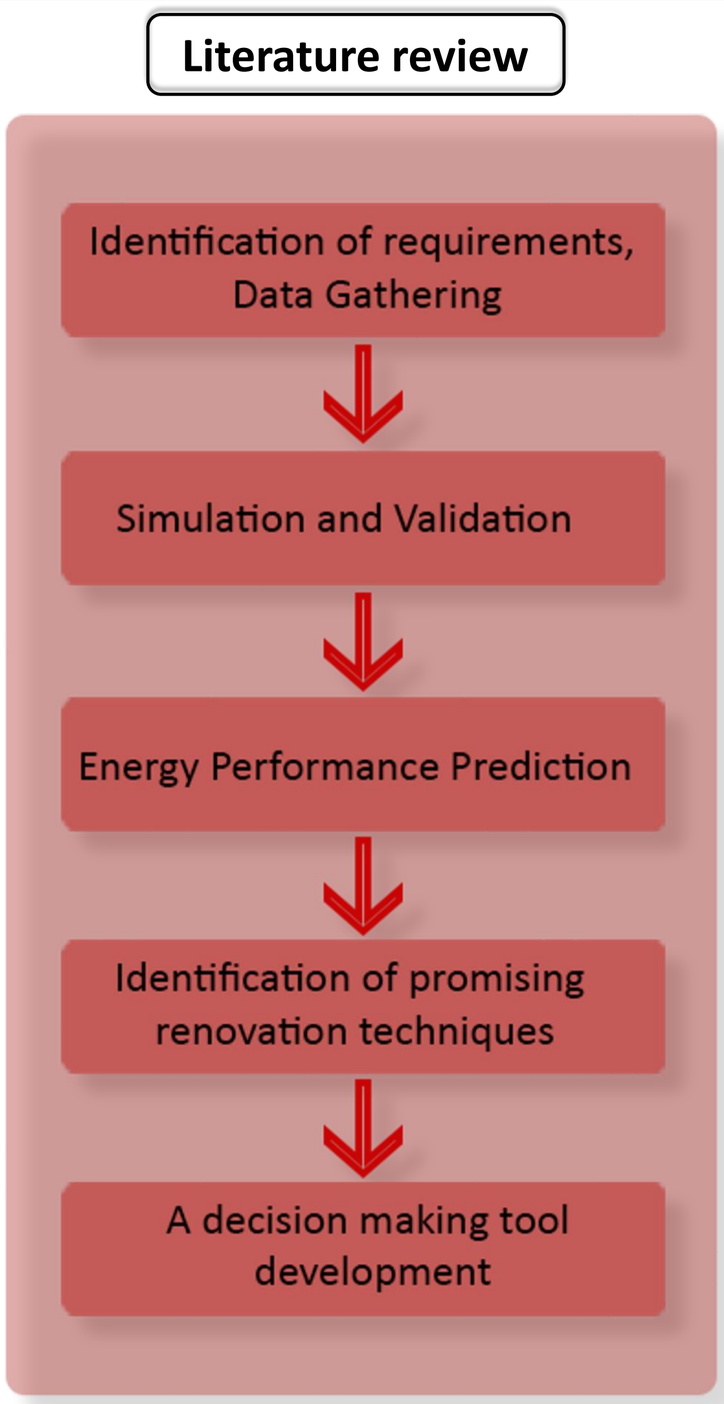
Motivation

Middle East countries lag in renovating their built environment to counteract the impact of climate change. The main reason for this is the low tax policy on fossil fuels, contributing to global warming and extreme weather events.

Main Objective

To understand how to design high-performance buildings with low carbon emissions in coastal cities of the Middle East.

Work Plan



Results

- A comprehensive **literature review** was carried out and the most efficient design strategies were identified.

It was published as a review article, DOI:https://doi.org/10.1016/j.jclepro.2021.127152

- From the **collection of the related data,** reference buildings were identified.
- Reference buildings were **simulated and validated.**
- Analysis of different **design strategies.**
- Synthesis of **recommendations** and development of **tool**

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