# Smera Sera Oommen

Architect (COA India) | LEED AP BD+C | WELL AP | EDGE Expert | LFA | IGBC AP ssoommen@andrew.cmu.edu | +1(412)606-1011 | Pittsburgh, PA

## **EDUCATION**

# **Carnegie Mellon University: School of Architecture**

### Master of Science in Building Performance & Diagnostics

Current roles: Graduate Research Assistant for the Centre of Building Performance, Teaching Assistant for LEED course, **Campus Decarbonization Researcher** 

Relevant Coursework: Environmental Life Cycle Assessment, Building Performance Modelling, Resilient & Sustainable Communities, HVAC and Power Supply for Low Carbon Buildings, Geospatial Data Analytics

#### Pune University, India: SMEF's Brick School of Architecture

#### **Bachelor of Architecture**

Thesis: Architecture for Urban Happiness – A Pause Point in a City Relevant Coursework: LEED Lab. Energy Efficient Design Studio, Urban Design, Research and Professional Writing

## WORK EXPERIENCE

#### Environmental Design Solutions Pvt. Ltd. (EDS Global), Mumbai

# Green Building Analyst/Sustainability Consultant

Optimized building performance for the Mahindra Citadel Residential project by conducting shading analysis and facade optimization using Grasshopper tools, enhancing energy efficiency through Residential Envelope Transmittance Value (RETV) calculations, daylighting simulations, thermal comfort, ventilation, and energy analysis.

 Led detailed daylight and glare analysis using Climate Studio for high-profile projects, including the Apple Flagship Store in Mumbai, Esplanade Mall in Bhubaneswar, Karle Town Centre and Wipro in Bengaluru, and the International Financial Services Centers Authority (IFSCA) in Gujarat, improving occupant comfort and visual guality.

Conducted life cycle assessments using the One Click LCA tool for Apple stores in Delhi and Mumbai, identifying strategies that reduced carbon emissions by approximately 30%, contributing to sustainable infrastructure development.

Managed sustainability certification processes for industry leaders such as Cognizant Technology Solutions, Apple, Tata Consultancy Services, Torrent Power, Mahindra Lifespaces, Mumbai Metro Rail Corporation, and J. Kumar Developers, spearheading efforts to secure USGBC LEED BD+C, LEED ID+C, and IGBC certifications, including Net Zero Energy and Waste.

 Performed in-depth calculations and analysis to support the development of zero-waste policies, facilitating LEED Zero Water and LEED Zero Waste/TRUE Certification for Nirlon Knowledge Park, a corporate office in Mumbai, driving corporate sustainability initiatives.

### Green Building Research Institute (GBRI), New York (Remote – Part time)

#### Senior Sustainability Research Associate

Developed Wellopedia, a comprehensive knowledge platform that simplifies the WELL rating system and showcases global case studies, improving accessibility for sustainability professionals.

 Authored insightful articles on sustainability and optimized the integration of multiple green building rating systems. enhancing cross-system understanding.

#### Sustainability Research Associate

• Developed, reviewed, and edited study materials and online courses on sustainability for the GBRI platform, covering LEED Green Associate, WELL AP, and IGBC AP exam preparation.

### LEED Lab, Pune

## Student Intern

 Conducted a feasibility and compliance assessment of Thermax, a commercial building in Pune, with the requirements of LEED Operations and Maintenance.

 Collaborated with the sustainability team of VK:e to develop comprehensive documentation, streamlining the LEED 0+M certification process and enhancing project efficiency.

### **OTHER**

Technical Skills - Rhinoceros 3D, Grasshopper, Climate Studio, Climate Consultant, eQUEST, OneClick LCA, OpenStudio, IES VE, REMRate, DesignBuilder, Arc GIS, Python, Autodesk Revit, Archicad, AutoCAD, SketchUp, Lumion, Twinmotion, Adobe Photoshop, Illustrator, InDesign, Microsoft Office

Certifications - LEED AP BD+C, WELL AP, EDGE Expert, Living Future Accreditation, Construction & Product Life Cycle Assessment Specialist, IGBC AP

Languages - English, Hindi, Malayalam, Marathi

August 2024 - May 2026

# August 2016 - May 2021

June 2019 - April 2020

March 2021 - October 2021

October 2021 – August 2023

GPA: 9.62/10

November 2021 - July 2024