

Kansateshri Megavaman

412-954-7895 | kmegavar@andrew.cmu.edu | www.linkedin.com/in/kansateshri-megavarnan/

Graduate student in sustainable design with a passion for building performance and energy efficiency, seeking opportunities to contribute to advancing sustainable building practices within your organization.

Education

Carnegie Mellon University, Pittsburgh, PA: *Master of Science – Sustainable Design (MSSD) (4.05 GPA)* **May 2026**

- **Relevant Coursework:** Environmental Performance Simulation (Climate Studio/Honeybee/Ladybug), Environmental Systems (RemRate/Climate Consultant), HVAC and Power Supply for Low Carbon Buildings, Shaping Daylight using Simulation and VR, Environmental Life Cycle Assessment, Scripting and Parametric Design (Python in Rhino/Grasshopper), Geospatial Data Analytics in Infrastructure Planning (GIS), Ecological Design Thinking, Paradigms of Research

Anna University, Chennai, India: *Bachelor of Architecture (B.Arch) (8.3 GPA)* **June 2024**

- **Relevant Coursework:** Sustainable Design, Environmental Design, Diagrammatic and Parametric Thinking, Human Behavior and Built Environment, Digital Visualization and Representation

Work Experience

Carnegie Mellon University, Pittsburgh, PA: *Graduate Research Assistant* **Sept 2024 - Present**

- Mapping, researching, and supporting data analytics to establish critical actions that an underserved neighborhood, Larimer in Pittsburgh, can undertake to achieve energy independence, carbon neutrality, and employment for 100 houses.

Carnegie Mellon University, Pittsburgh, PA: *Graduate Tutor* **Sept 2024 - Present**

- Have guided over 30 students of Allderice High School in crafting impactful school and college essays.

Midori Architects, Chennai, India: *Architectural Intern* **Dec 2022 – May 2023**

- Developed architectural solutions, BOQs, technical drawings, and 3D visualizations for a 4000 sqft residential project.
- Contributed to the conceptual design of a Zero Carbon Residence in Chennai, aiming for IGBC certification.
- Enhanced brand visibility by curating and managing social media platforms.

Sathish Moses Living Architecture, Chennai, India: *Student Researcher* **Sept 2022**

- Contributed to research on native agriculture, heritage, and vernacular/sustainable architectural strategies.

Academic Projects

Thesis and Design Dissertation:

- **Net Zero Energy School Design** – a low-energy school building designed mainly using passive cooling techniques.
- **Child in the City** – Presented a written paper documenting various social aspects of children their needs and experiences in the Urban environment.

Residential Energy Optimization, Environmental Systems: Climate & Energy in Buildings

- Conducted a comprehensive analysis of a Residence's existing conditions and energy usage in Portland, OR, leading to strategic implementation of targeted retrofits to optimize energy consumption and improve operational efficiency, with anticipated results of over 60% reduction in energy bills and a 2 to 3 year payback.

Parametric Solar Optimization, Scripting, and Parametric Design (Group of 2)

- Developing a parametric script to optimize solar panel orientation and spacing, maximizing simulated sun exposure through generative design systems on Rhino Grasshopper using Python scripting.

Office Building Design, Environmental Performance Simulation (Group of 2)

- Performed detailed climate and solar analysis for an office building in Washington, DC, optimizing form, orientation, fenestrations, and shading using Rhino, Grasshopper, and Climate Studio. Focused on daylight, visual comfort, and thermal performance, with an expected 50% EUI reduction to comply with IECC codes.

Volunteering

- **Child Rights and You:** Volunteered as a tutor for underprivileged middle school children; organized and led a successful fundraiser, raising ₹50,000 to enhance classroom resources, including a projector and screen.
- **Guindy Times:** Engaged with over 1,000 students as Deputy Director of Photography for a college magazine, leading initiatives in photography, magazine design, mentoring, and organizing workshops, competitions, and event coverage.

Skills

- **Software Skills:** Rhino, Grasshopper, Climate Studio, Climate Consultant, REM Rate, AutoCAD, Adobe Suite, Google Sketchup, Autodesk Revit, Microsoft Office, Enscape, V-Ray
- **Soft Skills:** Written and verbal communication, Presentation skills, Collaboration with cross-functional teams, Team leadership, Analytical thinking, Creative problem-solving, Decision-making, Research and Analysis

Awards and Certificates

- **Pursuing LEED Green Associate Certification**
- **Council of Architecture, India (Licensure in Progress)**
- **SoA Merit Scholarship** for Academic Excellence by Carnegie Mellon University **2024**
- **NASA GSEN Trophy: Top 10% of 80 teams:** Revival of Ecosystem in Manali, Chennai (Urban Scale) **2022**