

NIRMAL KUMAR KUMARASAMY

nkumaras@andrew.cmu.edu

Pittsburgh, PA

+1 (412)-626-1769

[LinkedIn](#) | [Website](#)

Architectural Designer

I'm an architect passionate about creating spaces that blend aesthetics and functionality while solving real-world challenges. I enjoy exploring innovative forms and rethinking how people interact with spaces. With a focus on efficiency, I develop workflows that save time and allow for diverse design iterations. I'm always eager to push the boundaries of architecture by experimenting with materials, forms, and advanced technologies. Learning from others and tackling challenges in design keeps me inspired and motivated to deliver meaningful solutions. Currently pursuing a Master's in Advanced Architectural Design at Carnegie Mellon University and seeking a summer 2025 internship to enhance my skills and contribute to impactful projects.

Education

Carnegie Mellon University, School of Architecture

/ Pittsburgh, PA / May, 2026

Master of Advanced Architectural Design (MAAD)

MEASI Academy of Architecture, Anna University

/ Chennai, India / May, 2021

Bachelor of Architecture (B.Arch)

Work Experiences

Research Assistant / [Carnegie Mellon University, School of Architecture](#)

/ Pittsburgh, PA / September 2024 - Present

Working under [Dana Cupkova](#), Associate Professor and Track Chair of the MSSD Program

- + Contributed to mycelium research by prototyping modular mycelium blocks and documenting their development for academic and design applications, while supporting bio-material innovation through 3D printing bioplastics.

Senior Architect / [NUDES](#)

/ Mumbai, India / April 2023 - April 2024

Junior Architect / [NUDES](#)

/ October 2021 - March 2023

- + **Diverse Project Portfolio:** Designed and developed a wide range of architectural projects, including pavilions, airports, wellness centers, villas, high-rise residential buildings, exhibition and convention centers, and office spaces.
- + **Lead Designer:** Served as the lead designer on various projects, collaborating closely with the principal architect to deliver concept design, design development, detailed design, presentation drawings, and renderings. Communicated design intent effectively to clients, securing approvals, and mentored architects and interns to foster professional growth and enhance team collaboration.
- + **Collaborative Coordination:** Worked closely with consultants such as ARUP and AECOM for structural, HVAC, and lighting design, as well as contractors, fabricators, and on-site teams to address challenges and ensure design integrity.
- + **Parametric and Computational Design:** Utilized Rhino and Grasshopper to create custom scripts for parametric design, automating fabrication drawings, optimizing material usage, and enabling flexible design iterations across diverse projects.
- + **Material Exploration and Innovation:** Explored sustainable materials such as timber and mud for various projects and contributed to a 3D concrete printing initiative, integrating innovative materials and techniques into design solutions.

Architectural Intern / [Archventure](#)

/ Bangalore, India / December 2019 - April 2020

- + Engaged in diverse residential and commercial projects, specializing in facade design
- + Produced comprehensive GFC drawings, plumbing plans, and electrical schematics.
- + Actively participated in on-site visits, providing invaluable insights and contributing to effective project supervision.

Architectural Intern / [Larson & Toubro Construction](#)

/ Chennai, India / July - October 2019

Project Name: "Yashobhoomi" (Indian International Convention Centre (IICC))

- + Utilized Revit and Navisworks for comprehensive project coordination, producing GFC drawings and detailed BOQs
- + Contributed to visually compelling presentations through the creation of immersive visualizations and VR walkthroughs.
- + Constructed a detailed physical model showcasing the ceiling design of the exhibition hall

Skills

- + **Design & Visualization:** Concept Design, Design Development, Detail Design Development, Parametric Design, Façade Design, Space Planning, Photorealistic Rendering, Physical Modelling
- + **Fabrication & Prototyping:** 3D Printing, CNC Fabrication, Laser Cutting
- + **Software:** Rhino, Revit, Sketchup, Grasshopper, Python, AutoCAD, Adobe Creative Suite (Photoshop, Illustrator, InDesign), Google Suite, QGIS, Twin Motion, Lumion, Rhino V-Ray
- + **Technical Skills:** Fabrication Drawings, Computational Workflows, Documentation & Reporting