

SURYAKIRAN PRABHAKARAN

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I bring 5 years of environmental research experience and 8+ years across architectural design. I help design teams navigate technical complexity in evaluating energy, carbon, daylighting, thermal comfort, and materials. Whether I'm assessing product labels, coordinating LEED documentation, or conducting embodied carbon analyses, I focus on making research findings actionable and straightforward for the people making design decisions.

EDUCATION

University of Pennsylvania, Stuart Weitzman School of Design Philadelphia, PA	Jul 2019 - Dec 2020
Master of Science in Design - Environmental Building Design	
Manipal Academy of Higher Education, Faculty of Architecture Manipal, India	May 2011 - Jul 2016
Bachelor of Architecture	

CERTIFICATIONS

- WELL Accredited Professional (WELL AP)** | International WELL Building Institute | 2022
- Healthier Materials and Sustainable Building Certificate** | The New School | 2024
- LEED Green Associate** | U.S. Green Building Council | 2021
- Registered Architect** | Council of Architecture - India | 2017

PROFESSIONAL EXPERIENCE

KieranTimberlake Philadelphia, PA	Sep 2021 - Present
Researcher - Building Performance	

RESEARCH EXPERTISE & KNOWLEDGE SHARING

- Provided expertise on setting sustainability targets for 10+ projects, conducting benchmark analyses and early-phase performance studies to align client aspirations with measurable energy, carbon, water, and material health metrics
- Conducted building performance analysis for 15+ projects studying peak energy loads, daylighting, glare control, thermal comfort, and solar access using ClimateStudio and Ladybug Tools to test design options and advise teams on facade and program strategies during early phases
- Assessed pedestrian wind comfort and facade downdraft conditions through CFD analysis using Autodesk Forma and Eddy 3D, informing massing strategies and occupant comfort
- Conducted whole building lifecycle assessments using Tally and product-level GWP comparisons with EC3 for 8+ projects, advising design teams on low-carbon material selections and structural systems that reduced project carbon footprints
- Advanced firm’s sustainability commitments by researching emerging practices in circularity and supply chain equity, developing internal guidelines and frameworks informed by evaluation of product certifications, Design for Freedom Toolkit, Common Materials Framework, and LEED Social Equity credit requirements

- Evaluated materials for human health impacts across multiple product categories, assessing chemical hazard data, worker safety, and product transparency and optimization labels to advise project teams on specification that met both performance and health criteria
- Evaluated building performance analysis tools (Pollination, ClimateStudio) and product tracking tools (Acelab, Sustainable Minds, BuildingEase), testing functionality and efficiency against workflow needs and led tool adoption through internal training sessions, and developing implementation guidelines for design teams

PROJECT COORDINATION & EXTERNAL ENGAGEMENT

- Served as Coordinating Researcher on 3 projects, consolidating research on site-specific environmental factors and facilitating goal-setting workshops with design teams to establish project sustainability goals, continued to track these goals across project phases ensuring that deeper investigations were carried out to inform design decisions
- Supported business development efforts by developing and presenting sustainability strategies in client interviews, connecting firm's technical capabilities to client's climate aspirations
- Coordinated LEED certification documentation, Living Building Challenge materials compliance, and AIA Design for Excellence Framework implementation with design teams and consultants, and prepared narratives
- Contribute to AIA Materials Pledge Working Group, bringing industry insights into firm strategy while advancing the firm's commitment through reporting and implementation of Acelab product tracking library across all current projects
- Represent firm externally through lectures (UPenn, Temple University), sustainability publications, and active participation in AIA working groups, elevating KT's thought leadership profile

University of Pennsylvania, Center for Environmental Building & Design | Philadelphia, PA
Research Associate

Sep 2019 - Sep 2021

- Developed real-time energy monitoring dashboard using QlikView, enabling facility managers to track and optimize portfolio energy performance
- Provided LCA expertise on innovative bio-materials research to through product-level evaluations using SimaPro

Kumar Consultants Architects | Bangalore, India
Project Architect

Sep 2016 - Jun 2018

- Presented design development proposals to clients for commercial and residential projects, incorporating feedback into design refinements and developing construction documentation drawing sets
- Managed construction administration for single-family residential project, conducting site visits to verify compliance with construction documents, reviewing contractor RFIs, and coordinating resolution of field conditions with consultants

TEACHING EXPERIENCE

University of Pennsylvania, Weitzman School of Design | Philadelphia, PA
Part-Time Lecturer: Environmental Building Design Research Studio (Summer 2021)
Part-Time Lecturer: Bioclimatic Design Studio (Fall 2022)

2021 - 2022

SOFT SKILLS

Building Performance: ClimateStudio, Ladybug Tools, Tally, EC3, LBNL tools (THERM, Window), Grasshopper/Rhino

Data Analytics: Python-Pandas, Microsoft Excel, ArcGIS, QGIS

Visualization: Adobe Creative Suite (Photoshop, InDesign, Illustrator), Microsoft PowerPoint, Tableau