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# KEERTHANA GOVINDARAZAN

PhD Student, Stuckeman School of Architecture, Pennsylvania State University

Interests:  
 Architecture and Computational design  
 Environmental Psychology and Neuroarchitecture  
 Immersive Technology and User Experience Research

## EXPERIENCE

### 1 Research Assistant

Pennsylvania State University, Aug 2022 - present

**Responsibilities:** Revive the Immersive Environments lab (IEL) at the Stuckeman School of Arts & Architecture, PSU. Plan & organise a symposium on Embodied VR for Art and Architecture in 2023.

### 2 Founder / Designer

Tuko Design House, March 2020 - Present

Developed UX and UI for Instagram game filters to assist small-scale companies reach a wider audience.

### 3 UX/UI Designer

Takeleap, Chennai, Nov 2017 - June 2018

Developed UX principles for apps created for various HMDs; Created UX and UI for Oculus Rift, Htc Vive and Microsoft Hololens projects.

### 4 Other Design Experience

1. **Digital Fabricator**, Makerspace - Volumes Paris | Nov 2016 - May 2017
2. **NATA Instructor / Freelance Architect/Designer** Chennai | June 2015 - Aug 2016
3. **Computational Design Intern**, StudioSeed Barcelona | Jan - Mar 2014
4. **Intern Architect**, Centre for Vernacular Architecture, Chennai | July - Oct 2013

## LEADERSHIP

**Secretary** - Graduate Research and Innovative Design, Stuckeman School of Architecture (GRID), PSU. Aug 2022 - Present.

**Student Delegate** - Graduate and Professional Student Association (GPSA), PSU. Aug 2022 - Present.

**Treasurer** - Nriya - Student club for Indian Classical Dance, PSU. January 2023 - Present

## PUBLICATION (peer-reviewed)

Govindarazan, Keerthana. "Web-Based VR for Behavior Analysis of Architectural Designs: Developing and Testing a Prototype." DNArchi, 17 Sept. 2021, <https://doi.org/10.48568/RWVW-WH32>

**CONFERENCE** - Presented at 'Design, Emotion and Neurocognition' conference by DNArchi.

## EDUCATION

### 1 PhD in Architecture

Stuckeman Center for Design Computing, Pennsylvania State University (PSU) Aug 2022 - present

**Topic: Working at the intersection of neuroarchitecture, embodied cognition and immersive technology. Investigating the creative use of immersive VR to understand the embodied relationship to the built environment.**

**Courses:** Research Methods in Communication, Shape Grammar, Introduction to Cognitive Psychology, Psychological Aspects of Technology, Foundations in HCI.

### 2 M.Sc. Psychology

Tamil Nadu Open University, Chennai, India (distance education) 2019 - 2021

### 3 MS Design by Data

Ecole des Ponts, ParisTech, Paris, France 2016 - 2017

**Research Project Title:** Mindscape

**Research Paper:** "User testing architectural design for behavioural patterns using a rudimentary web VR system".

**Abstract:** Designed a Virtual WebVR museum using design principles from 'A Pattern Language' by Christopher Alexander. Recorded user clicks (20 participants) in the WebVR environment during the VR experience to track user movement. Compared the collected behavioural data to real-world movement patterns (as predicted by the chosen patterns). Examined the relationship between design variables and behaviour, validated Christopher Alexander's patterns in VR and found support for use of WebVR for pre-occupancy evaluation of buildings.

### 4 B.Arch

School of Architecture & Planning, Anna University, Chennai, India 2010 - 2015

## ACHIEVEMENTS AND AWARDS

1. **Funded by** the Center for Immersive Experiences (CIE), Pennsylvania State University
2. Graduate research project (Mindscape: VR for architectural behaviour studies) was selected to be **demonstrated at IEEE ISMAR 2017**, Nantes, France.
3. Recipient of **Charpak Scholarship** from Campus France
4. NATA (National Aptitude Test in Architecture) Score - 129;

## SKILLS

1. Architectural Design, 2. User Experience Design, 3. Research methods
4. Unity, 5. Rhino + Grasshopper, 6. Adobe Illustrator, Photoshop, After Effects