

# Payod Panda Design engineering and HCI researcher

panda@payodpanda.com | payodpanda.com | LinkedIn | Google Scholar | Last update 2024.01 I work at the intersection of design, engineering, and research to study the future of collaborative work using spatial computing technologies.

## Education

- 2021 PhD in Design North Carolina State University. "Immersive Technology in the Future of Work"
  2016 Master in Graphic Design NC State University. 3D visualizations to help designers learn code.
- **2013** B.Tech, Production Engineering National Institute of Technology, Calicut

## Selected Experience

**Microsoft Research** Design Engineering Researcher (BREW) February, 2022 - present Researching the future of collaborative knowledge work. I lead the artefact-led research arm for our team (<u>link</u>). I build or direct artefact creation to conduct or extend foundational research. I use the results to guide UX research in product teams (Mesh, Teams). Have led my own projects while mentoring and guiding PhD interns and junior researchers. My work has been awarded 2 patents, 1 best paper award, and recognized by senior leadership in Microsoft Research.

With Dr. Ham, I decided the lab research direction and vision. I directly managed one PhD,

two masters, and three undergraduate students. I inculcated a research-minded culture in the lab, which was novel for the College of Design. I led a paper discussion forum, and introduced

the MxR Lab Academy. I enabled lab members deliver successful products by guiding concept development and providing support with C#/Unity, Arduino, h/w prototyping, lo-fi prototypes.

# College of Design, NCSU

Research Lab Manager (MxR Lab) January, 2019 - August, 2021

#### **Microsoft Research**

Research Intern (OCTO: Office of the CTO) May - August, 2020

#### Google Brain Robotics

UX Engineering Intern (Unannounced Project) May - August, 2019

#### Google

UX Engineering Intern (Google Docs + Sheets) May - August, 2018

#### Relevant Recent Projects

Al, Hybrid work, VR Hybrid work, Cross-device Hybrid work, Cross-device Hybrid work, Cross-device Hybrid work, Cross-device Hybrid work, Inking , VR Inking , Haptics, VR Worked with Jaron Lanier (OCTO) and Mar Gonzalez-Franco (EPIC) to bridge research with product (Microsoft Teams). Explored the use of virtual avatars in Together Mode in MS Teams. Co-led a hackathon team of six including interns and principal researchers to prototype patented product concept. Got buy-in from decision makers in multiple product teams (Teams, Surface). 1 patent application and three publications (DIS, AIVR, CHIWORK).

Built interaction design approaches for hybrid VR and screen-based media in unannounced Google project. Enabled my team to explore these directions by building mid- and high-fidelity functional prototypes with existing tech stack, and implementing features in product by writing C# code for Unity game engine-based project.

Built high fidelity web prototypes to test ideas with participants. Worked with stakeholders to identify high-impact directions, got buy-in, and delivered work in a useful format for existing teams. Designed mockups, cafe studies, mid- and hi-fidelity prototype development, research design and analysis. Awarded Google Peer Bonus award **for "going above and beyond".** 

CoExplorer: Adaptive 2D and 3D meeting interfaces. 2023. Hybridge3D: Hybrid meeting room asymmetrical prototype. 2022-2023. Beyond Audio: Headphones as a site for interaction. 2022. DIS'23 (<u>link</u>) **Best paper** AllTogether: Avatars in hybrid conferencing environments. 2021. CHIWORK'22 (<u>link</u>) Exploring the Mixed reality space for remote learning. 2020-2021. NapkinSketchVR: A Collaborative rapid VR ideation tool. 2020-2021. Morphaces: Morphable surfaces for tangible sketching in VR. 2020. C&C'21 (<u>link</u>)

# <mark>Patents</mark>

US Patent 11,792,364 US Patent 11,669,294 Headset virtual presence. Computing device headset input.