

# Charan Pushpanathan Prabavathi

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Portfolio: <https://charanpushpanathan.com/>

## Research Interests

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Human-computer interaction, digital transformation, accessibility, qualitative and quantitative research, ubiquitous and wearable computing, human-AI interaction, interactive computing, CSCW.

## Education

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**The Pennsylvania State University**, University Park, PA      Aug 2023 to Expected May 2025  
Master of Science, Informatics      GPA: 4.0/4.0  
Concentration: Human-Computer Interaction | Advisor: Dr. John M. Carroll

**Kumaraguru College of Technology**, Coimbatore, India      Aug 2019 to Apr 2023  
**Affl. Anna University**  
Bachelor's of Engineering, Computer Science      GPA: 3.4/4.0

## Research Experience

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**Collaboration Innovation Laboratory**      State College, Pennsylvania  
Graduate Research Assistant      Feb-2024 to Present

- Conducted co-parenting research under Professor John M. Carroll, in collaboration with two PhD students and a Postdoc.
- Reviewed over 80 research papers on coparenting, closeness, and togetherness across HCI, familial and personal relationships, sociology, and anthropology. Contributed to the writing literature review, discussions, and structuring the research direction.
- Leading the development of a co-parenting technology system as a main author with a PhD student for a prototype study; work is in progress with plans to submit as extended abstracts.
- Exploring Human-AI interaction frameworks, currently working on a brief literature review study.

## Professional Experience

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**HDFC Bank Limited**      Mumbai, India

Product Designer Intern

Nov 2022 to Jun 2023

- Spearheaded design efforts in account aggregator financial data sharing, bill payments & utilities, schemes, lending services, consumer rewards, and payments.
- Implemented on comprehensive benchmarking activities resulting in visual design enhancements. Led innovation assistive technology product ideation to build phase as an individual.
- Revamped interfaces for digital banking, and performed field studies, and developed information architectures.

**Angel Startup in Capital Market** (Closed Startup)  
Founding Member and Designer

Remote, India  
Aug 2022 to Oct 2022

- As founding designer, led design and strategy for the biggest capital market platform for supporting social learning and investing.
- Planned Interfaces for prototyping presented in pitches, conceptualized the business model, and catered to customer requirements.
- Explored diverse concepts in the Indian capital markets, spanning stocks, brokerage, lending, and investments.
- A team of 6 individuals, ahead of seed funding, has closed the startup due to a regulatory impact in the securities market.

**Freecharge backed by Axis Bank Limited**  
Product Designer Intern

Bangalore, India  
Jul 2021 to Jan 2022

- Focused on Neo-Banking (20Mn users) emailers, Pay-later (30Mn users) features, the Wallet application for Axis Bank, Mutual funds, utility bill payments, and user account management.
- Designed interfaces and product revamps, PWAs, and wireframes, and spearheaded qualitative research. Research focuses on user interviews, field studies, usability tests, A/B tests, and design iterations.
- Nominated for the Tech Award due to significant contributions to Neo-banking emailers along with ten senior designers.

## Publications

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**C1. [Under Review]** Ya Fang lin, Vivian liu, Jie cai, **Charan**, John M Carroll. (2025). Adding sense to closeness and togetherness. *ACM (Association of Computing Machinery) CHI conference on Human Factors in Computing Systems*.

**C2. [Work under Progress]** Charan, Ya Fang lin. (2025). Title yet to be decided. *Extended Abstracts*.

## Projects

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**Post and Gather**

Part of Course HCI: Human and Technology

- Designed and developed Post and Gather System, event aggregators for Penn State University. Created a post system for students to stay informed about events. Gather system as a publisher tool for event organizers.
- Conducted qualitative studies, thematic analysis, designed prototypes, and produced documentation.

## Talks

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How to present a presentation, *CS department*

Dec 2022

Persuasive Design: Influencing Billions of Mobile Users, *Professor's table*

Jan 2023

## Skills

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- **Software:** Sketch, Figma, Go-transcribe, Keynote, Adobe XD, Zeplin, Overflow
- **Mixed Methods (Qualitative & Quantitative):** Data Collection (Verbal protocol analysis, Interview, Survey); Data Analysis (Thematic Analysis); UX evaluation (Usability Testing, Competitive Analysis).
- **Programming Languages:** Python, NoSql Database, Cloud computing, HTML/CSS, and Data visualization.

## Test Scores

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American English Oral Communicative Test (AEOCPT), *Pennsylvania State University*

Score: 293/300

Jan 2024