CHARAN PUSHPANATHAN PRABAVATHI

State College, PA | +1 (582) 203-8144 | linkedin.com/in/charanpushpanathan
charanpp1603@gmail.com | **Portfolio:** charanpushpanathan.com/minimalistmanual.html

SKILLS

UX Research Methods	User Interviews, Usability Testing, A/B Testing, Design Rationale, Field Studies, Participatory Design, Thematic Analysis, an Mixed Methods
UX/UI Design	Information Architecture, Wireframing, Prototyping, User Flows, Interface Design, Accessibility, User-Centered Design
Tools & Software	Figma, InVision, Zeplin, Sketch, Adobe XD, HTML/CSS, JavaScript, Python, Data Visualization

EDUCATION

Pennsylvania State University, University Park — State College, PA
Master of Science in Informatics, Human Computer Interaction — 08/2023 - 05/2025 (Expected)
Advisor: Prof. John M. Carroll
GPA: 4.0/4.0; Research Focus: Collaborative Systems, Technology-Mediated Interactions
Relevant Coursework: Research Methods in HCI, Cognitive Science, User and Technology, Applied Machine Learning, Human-Centered AI, XR Interface Design, Intelligent Systems

Kumaraguru College of Technology, Anna University — Coimbatore, India
Bachelor of Engineering in Computer Science and Engineering — 08/2019 - 04/2023
GPA: 8.12/10; First Class
Relevant Coursework: Data Structures, Algorithms, Database Systems, User Interface Development, Object-Oriented Programming, Machine Learning

WORK EXPERIENCE

HDFC Bank Limited — *Mumbai, India*
Product Designer Intern — 11/2022 - 06/2023

- Spearheaded design for account aggregator financial data sharing and payment systems, achieving 93% User-Acceptance Testing success rate and reducing user task completion time by 35
- Executed comprehensive benchmarking across 8 competing financial products, implementing 12+ visual design enhancements and accessibility improvements for banking services
- Performed 15+ field studies and designed information architecture for digital banking platforms, creating seamless user experiences for 5+ banking journeys used by 70M customers
- Led assistive technology product innovation from ideation to build phase, applying inclusive design principles to improve accessibility for users with diverse needs, increasing accessibility compliance by 40

Angel Startup in Capital Market — *Bengaluru, India*
Founding Designer — 08/2022 - 10/2022

- Led design strategy for social learning investment platform, focusing on user-centered interface design and experience mapping across 6 core user flows
- Crafted 5+ interactive prototypes and user flows for funding pitches, creating compelling presentations that secured interest from 2 potential investors
- Executed market research across 3 Indian capital markets including stocks, brokerage, and investment platforms, analyzing 7 competitors to inform design decisions
- Collaborated with 6-person founding team through early funding phases, developing MVP design within 8-week timeline before regulatory changes impacted the business model

Freecharge (Axis Bank) *Bengaluru, India*
UX Research Intern 07/2021 - 01/2022

- Designed interfaces for Neo-Banking (20M users), Pay-later features (30M users), and Axis Bank wallet applications, supporting daily transactions
- Performed qualitative analysis through 10 user interviews, 5 field studies, 2 usability tests, and 3 A/B testing methodologies
- Created design iterations based on research insights and studies that increased user engagement metrics by 18%. Contributed to the design system revamp for the new product version, aligning new visual language with scalable component architecture and accessibility standards.
- Nominated for Tech Award for contributions to Neo-banking redesign alongside senior designers, recognized as 1st of intern projects

RESEARCH PROJECTS

Collaborative Systems for Co-Parenting | UX Research, Co-design, HCI
Led research at Penn State examining co-parenting technology through 10+ design workshops with parent couples
Co-authored DIS and CHILBW 2025 publications based on synthesis of 120+ interdisciplinary research papers

Trust and Decision-Making in XR | Explainable AI, User Research
Analyzed 89 papers to create framework for AI explanation techniques in XR interfaces, focusing on visualization methods' impact on user trust and ethical implications in Human-AI collaboration

Post and Gather - Campus Event Platform | UX Research, HCI
Analyzed user behavior with event organizers using Hierarchical Task Analysis to identify 10 critical workflow tasks. Integrated platform serving Penn State's 24 campuses based on evidence-based HCI methodologies

Natural Language Understanding | Conversational AI, UX Design
Built conversational AI interfaces with arithmetic and web crawling capabilities. Optimized GPT-2 models using PEFT/LoRA and created multimodal system integrating vision, speech, and text processing

PUBLICATIONS

- Li, Y.F., Li, X., Huang, W.H., **Pushpanathan, C.**, Cai, J., Carroll, J.M. (2025). Parental Collaboration and Closeness: A Co-Design Exploration with New Couple Parents. *ACM Conference on Designing Interactive Systems* [Under Review].
- **Pushpanathan, C.**, Li, Y.F., Carroll, J.M. (2025). Design Rationale: Co-Ordination System. *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems* [Under Review].

TEACHING EXPERIENCE

College of Information Sciences and Technology, Penn State *University Park, PA*
Teaching Assistant

- IST 505 - Foundations of Research Design in Information Sciences and Technology (Spring 2025)
- IST 526 - Development Tools and Visualizations for Human-Computer Interaction (Spring 2025)
- IST 402 - Emerging Issues and Technology: Computer Graphics and Virtual Reality (Fall 2024)
- IST 504 - Foundations of Theories and Methods of Information Sciences Research (Fall 2024)

INVITED TALKS

Kumaraguru College of Technology *Coimbatore, India*
Guest Speaker

- "Nudge Theory: Influencing Billions of Mobile Users" – Presented to professors, simplifying behavioral concepts (Jan 2023)
- "Presentation Strategies for VC and Academia" – Spoke to 40+ students (Dec 2022)