

Casey Ash

hellocaseyash@gmail.com | [Website](#)

SKILLS

- Computer-Aided Drafting (CAD)
- Precise Design Documentation
- 3D Modeling and Visualization
- Spatial Interaction Patterns
- Conceptual Idea Development
- User-centric Design Methods
- Prototyping and Iterative Design
- Cross-disciplinary Collaboration
- Product Strategy
- Attention to Detail
- Qualitative Research
- Quantitative Research

WORK EXPERIENCE

Independent Researcher

Technospatial

Knoxville, TN

May 2022 – Present

Research and Innovation: Conduct literature reviews to assess progress in robotics and artificial intelligence.

- Analyze the intersection of human factors and robotics to inform and expand interaction modality selection.
- Investigate spatiotemporal data systems to uncover opportunities for enhancing real-time interactions.
- Design comparative analysis frameworks for emerging interaction technologies and patterns.

User Experience and Interaction: Craft interface design systems for spatiotemporal applications and platforms.

- Implement user experience design methodologies to optimize human-technology interactions.
- Use Adobe Creative Suite (Photoshop, Illustrator, InDesign) for concept visualizations and design documentation.
- Develop cohesive multi-device workflows to optimize seamless interactions across platforms.

Prototyping and Development: Leverage microcontrollers, Rhinoceros 3D, and Ultimaker Cura for rapid prototyping.

- Design and fabricate device housings and enclosures via additive manufacturing for cyber-physical devices.
- Select 3D printing filament, including but not limited to, TPU/TPE, ASA, PETG, LW-PLA, based on project needs.
- Create cyber-physical product designs that promote technological accessibility and bridge the digital divide.

Designer

Independent Merchant Space

Knoxville, TN

May 2022 – Present

Brand Experience: Maintain and merchandise vendor space that facilitates an engaging in-store experience.

- Curate and maintain engaging vendor space showcasing 3D-printed, handcrafted, and purchased merchandise.
- Maximize small retail footprint through product curation, display strategies, and layout optimization.
- Execute end-to-end product development from 3D modeling, prototyping, and final production.
- Analyze multi-channel quantitative and qualitative data to optimize product mix and seasonal offerings.

Temporary User Experience Designer / Information Architect

University of Michigan

Remote | Ann Arbor, MI

June 2020 – May 2022

User Research: Formulated donor content personalization method based on qualitative and quantitative research.

- Delivered thoughtful analysis of 612 digital donor survey responses related to intrinsic philanthropic motivations.
- Analyzed 3 years of Google Analytics Events data to generate recommendations on information architecture.
- Evaluated the geographical reach of 6 content foci across the U.S. for dynamic content recommendations.

Design Deliverables: Integrated research synthesis and user experience strategy to accelerate implementation.

- Generated 4 nonlinear donor journeys to analyze interpersonal relationships and interactions with the university.
- Crafted 4 series of high fidelity mobile wireframes focused on digital donor data privacy and in situ research.
- Introduced digital donor experience strategy focused on the principles of network science and machine learning.

Leadership: Orchestrated internal philanthropic ecosystem discovery by collaborating with university stakeholders.

- Synthesized interview notes from 10 internal team interviews into a collaborative ecosystem diagram.
- Designed and led analysis on an attitudinal survey that reached 837 staff members with 40% completion rate.
- Communicated research results and recommendations to university leadership at both team and unit levels.

EDUCATION

Master of Architecture (3.5 year program) *University of Michigan*

June 2018 – May 2021

Bachelor of Science in Business Administration *University of Tennessee*