

Kennedy DeSousa

Human Factors Engineer

Boston, MA | (619) 944-8565 | kennedydesousa@gmail.com | www.kennedydesousa.com

SUMMARY

Human Factors Engineer with 5+ years of experience spanning UX research, human-centered design, and regulated medical device development. Currently supporting the Omnipod insulin delivery system at Insulet Corporation through formative human factors studies, root cause analysis, and use-related risk assessment to improve patient safety. Strong background in FDA and international usability standards (IEC 62366-1, FDA Human Factors Guidance, ISO 14971), cross-functional collaboration, and translating user data into actionable design and risk mitigation strategies.

EDUCATION & CERTIFICATIONS

MSc, Human-Computer Interaction — DePaul University

BFA — California Institute of the Arts

UX Design Certificate — UC Berkeley Extension

Human Factors for Medical Devices Certificate — AAMI (24-hour training, 2025)

CITI Program — Human Subjects Research, 2023

Interaction Design Foundation Certificates (7): Conducting Usability Testing; Human-Computer Interaction (HCI); Design Thinking; User Experience Fundamentals; Gestalt Psychology and Web Design; UX Portfolio Development

PROFESSIONAL EXPERIENCE

INSULET CORPORATION — Acton, MA

Associate Human Factors Engineer | October 2024 – Present

- Conduct root cause analyses (RCA) to identify use-related risks and develop actionable design recommendations supporting patient safety for the Omnipod insulin delivery system
- Plan, execute, and report formative human factors studies to inform device design optimization and usability validation
- Author human factors documentation including study protocols, usability engineering plans, use specifications, and reports in accordance with FDA guidance and IEC 62366-1
- Perform qualitative analysis of subjective and objective study data, translating findings into design and risk mitigation recommendations for cross-functional stakeholders
- Utilize Helix RCM to support risk management activities, including Use Error Risk Analysis (UERA)
- Coordinate participant recruitment, study logistics, and facilities management for formative and validation activities
- Collaborate with product development, quality, regulatory, and clinical teams to integrate human factors principles throughout the design lifecycle

JOHNSON & JOHNSON MEDTECH — Cincinnati, OH

Human Factors Engineer Co-op | January 2024 – June 2024

- Led task analyses for surgical devices using PCA (Perception, Cognition, Action) methodology, identifying high-severity use-related risks that informed formative usability studies

- Conducted gap analyses of Usability Engineering Plans (UEPs) across multiple business units to align with FDA guidance and IEC 62366-1
- Partnered with cross-site teams to present gap analysis findings and harmonize usability engineering practices
- Redesigned UEP maps in Figma to improve accessibility, clarity, and cross-team collaboration
- Collaborated with cross-functional partners (design, quality, regulatory, pre-clinical) to identify critical tasks using AFMEAs and support formative study planning

SONY ELECTRONICS — San Diego, CA

Senior Human Factors Engineer | June 2022 – October 2022

- Conducted competitive accessibility analyses for consumer audio products and delivered recommendations to improve accessibility and compliance
- Designed and administered Qualtrics surveys to gather user feedback and inform product decisions
- Presented research findings to stakeholders and partnered with product teams to address usability issues

BLINK UX — San Diego, CA

UX Research Assistant | January 2022 – May 2022

- Supported evaluative user research studies for enterprise clients including Amazon and Meta
- Contributed to research synthesis, reporting, and presentation of actionable insights

SDXD (San Diego Experience Design) — San Diego, CA

Head of User Experience & Board Member | June 2020 – June 2022

- Led UX strategy for a professional design community, growing membership from 2,500 to 5,000 within 18 months
- Applied research-driven programming and engagement strategies to improve member experience
- Partnered with product owners to align user needs with organizational goals

APPLE — Sunnyvale, CA

2D Analyst (Contract) | April 2015 – May 2016

- Performed detailed analysis and QA on proprietary systems, processing large datasets to improve system functionality

TECHNICAL SKILLS

Human Factors & Research: Formative and Summative Usability Studies, Root Cause Analysis (RCA), Task Analysis, PCA Analysis, FMEA/AFMEA, Heuristic Evaluation, Contextual Inquiry, Use Error Risk Analysis (UERA), Qualitative Data Analysis

Regulatory & Standards: ANSI/AAMI HE75, IEC 62366-1, FDA Human Factors Guidance, ISO 14971, Usability Engineering Plans (UEP)

Tools & Software: Figma, Sketch, Axure, Adobe Creative Suite, Helix RCM, Qualtrics, Optimal Workshop, UserTesting

Documentation & Productivity: Technical Writing, Study Protocols, Human Factors Reports, Microsoft Office (Word, PowerPoint, Excel)