



Emma M. Levitt

Human Factors Engineer
(Usability & Design)



emma.m.levitt@gmail.com



(301) 717-2785



44 Veterans Memorial Dr. E, Apt 417

Somerville, NJ 08876



linkedin.com/in/emmamlevitt

ABOUT ME

I am a Human Factors/Usability Engineer with 5+ years of experience in highly regulated industries including the medical device and transportation sector. I enjoy utilizing my diverse skillset to evaluate and create better design solutions for today's healthcare challenges. As a consultant, I have seen the full spectrum of products ranging from simple home drug-delivery systems, to complex surgical systems. I love working cross-functionally with teams to truly understand the team's needs and continue to deliver data-driven results all the way through FDA submission. I am an enthusiastic team player, passionate user advocate, and aspiring leader.

PROFESSIONAL HUMAN FACTORS EXPERIENCE

HUMAN FACTORS ENGINEER (CONTRACTOR, 80%) | ETHICON, IN PARTNERSHIP WITH DESIGN SCIENCE

Remote, with Travel to Santa Clara, CA office location | May, 2021-Present

- Provides in-house human factors support for 5+ robotic surgical subsystems.
- Works cross-functionally with engineering and clinical innovation partners.
- Conducts all aspects of internal formative usability research and presents findings to top level management & key stakeholders.
- Supports system level uFMEA development as subsystem SME.
- Develops ergonomic & anthropometric skills to support product requirements.

HUMAN FACTORS ENGINEER (DESIGN) | DESIGN SCIENCE

Philadelphia, PA | January 2019-Present

- Manages & executes all aspects of usability sessions for 85+ formative & validation/summative studies (in-person & remote) according to industry standards.
- Authors human factors protocols, HFE/UE reports, and visual formative reports, delivering high quality results that retain top-tier clients.
- Supervises and mentors 6+ full-time engineers & undergraduate co-op students.
- Developed usability new-hire training program and continues to train staff.
- Contributed to heuristic evaluations and ergonomic assessments for Executive.

ASSOCIATE ENGINEER II | DESIGN SCIENCE

Philadelphia, PA | November 2017-January 2019

- Evaluated instructions for use, package inserts, graphical user interfaces, companion software applications, labeling, and uFMEAs in usability studies.
- Conducted ethnographic field research in home, operating room, and cadaver lab environments (U.S. & International).

ANALYST I | DESIGN SCIENCE

Philadelphia, PA | March 2016-November 2017

- Analyzed quantitative and qualitative usability data, including video analysis on contextual inquiry/ethnographic research.

USER EXPERIENCE DESIGN INTERN | PEGASYSTEMS

Cambridge, MA | July-August 2014

ENGINEERING PSYCHOLOGIST STUDENT TRAINEE | VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER

Cambridge, MA | June-August 2013 | Acquired Security Clearance

EDUCATION

BS MECHANICAL ENGINEERING CONCENTRATION IN HUMAN FACTORS

Tufts University | May 2015

Dean's List

**Tufts in Talloires, France Study
Abroad Program** | May-July 2014

SKILLSETS

HUMAN FACTORS

- Client Management & Engagement
- Usability Study and Survey Design
- Protocols, discussion guides, & reports
- Moderating & Root Cause Analysis
- Informed Consents, compliant with IRB
- Training Development
- Task Analyses
- uFMEA & use-related risk assessments
- Heuristic Evaluations & Expert Review

REGULATORY

- FDA Guidance: Applying Human Factors and Usability Engineering to Medical Devices
- IEC/ISO 62366 Parts 1: 2015 & 2: 2016
- ANSI/AAMI/ISO 14971

SOFTWARE

- Microsoft PowerPoint, Excel, & Word
- OpenClinica; DatStat Survey software
- Video data capture setup
- Marvel App Prototyping; Sketch

CERTIFICATIONS & LEADERSHIP

ASSOCIATE HUMAN FACTORS
PROFESSIONAL (AHFP)
BCPE | 2017, CHFP Expected 2022

PRINCIPAL INVESTIGATOR
CITI Program, CASTLE IRB, 2020

COLLEGIATE LEADERSHIP INSTITUTE
Society of Women Engineers WE13
Future Leader, FY14

PRESIDENT
Protestant Student Association