

Andrew Lilja, principal human factors engineer

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WORK **Medtronic**

2023– *Principal Human Factors Design Engineer*
2021–2023 *Senior Human Factors Design Engineer*
2018–2021 *Human Factors Consultant*

- Human factors lead for flagship pacemaker programmer system, delivering safe designs grounded in user needs and patient safety.
- Consult on internal projects for running effective user studies, drawing conclusions from results, and building interfaces based on findings.
- Oversee and execute regular user studies across the United States and Europe.
- Identify and resolve usability, safety, and regulatory issues within programmer and development processes.
- Co-lead the human factors internship program. Responsible for recruiting new interns and mentoring them over the course of a year. All mentees were hired by the company.
- Part of a team of two that completely rewrote a foundational design and safety document, which is now used as the standard within the organization.
- Developed and executed six regulatory studies for FDA and TÜV submission with zero regulatory follow-up or audit findings. Handed off this responsibility to engineers I trained.
- Led a team of four that rewrote the system-wide style guide and UI library.
- Developed a new, high-communication/low-ambiguity design handoff procedure.
- Overhauled the onboarding process for new hires, including writing new educational materials and conducting extensive follow-up interviews.

Gustavus Adolphus College

2021 *Visiting Professor*

- Developed a *Human-Computer Interaction 101* curriculum from scratch.
- Taught three hour-long classes each week for one semester covering topics ranging from Don Norman's interaction basics to designing for VR and AI.
- Students conducted a semester-long design project, from needsfinding through prototyping, design iteration, and final presentations.

Gomoll Research and Design

2015–2021 *User Experience Consultant*

- Brought expertise in user testing and design to a range of clients, working with stakeholders in engineering and management to identify product needs.
- Developed and executed user research with tens to hundreds of participants.
- Delivered prototypes, branding guidelines, and final recommendations to developers and clients.

SPEAKING

University of Minnesota, College of Design

2022–

I regularly speak with students in product and interaction design classes about industry work and conduct portfolio and resume reviews.

Human Factors Engineering & Usability Studies Congress

Philadelphia, October 2023

Invited to speak about how to work with scared, hostile, and reticent study participants.

EDUCATION

Iowa State University

2013–2016

M.S., human-computer interaction

Gustavus Adolphus College

2009–2013

B.A., psychology and neuroscience