MIELA EFRAIM

miela0220@gmail.com • LinkedIn • mielaefraim.com

EDUCATION

Tufts University

- M.S. in Human Factors Engineering, Concentration in Medical Technology (GPA: 3.89)   *2023 - 2024*
- B.S. in Engineering Psychology, Minor in Engineering Management (GPA: 3.78)   *2020 - 2023*

EXPERIENCE

Human Factors Intern, B-One Design   *Nov 2025 - Present*

- Identifying potential use errors to support use-related risk analysis for a synthetic corneal implant device
- Analyzing simulated-use testing data to investigate root causes of task failures and inform risk mitigation strategies
- Authoring formative testing protocols and human factors validation reports adhering to ISO 14971 and IEC 62366

Learning Experience Designer, Center for Engineering Education & Outreach   *Jan 2023 - Aug 2024*

- Developed lesson plans and IFUs for custom coding and robotics curriculum aligned with NGSS for 6th graders
- Taught project-based lessons weekly to 35+ students, implemented task-oriented instructions for design challenges
- Led artifact analysis of project submissions to assess student learning, improve task clarity and refine curriculum

Human Factors Researcher, elemed   *Jan 2023 - Aug 2023*

- Led known problems analysis and cognitive task analysis of current medication adherence solutions for elderly users
- Ideated sensor alert system integrating visual and auditory reminders from a pill storage device with a mobile app
- Created a moderator guide, checklist, and structured interview questions for usability testing with 6 senior citizens

UX Research + Design Lead, JumboCode   *Aug 2022 - Aug 2023*

- Designed task flows and high-fidelity mockups for new order management system for client's backend website
- Conducted heuristic analysis of current site, led client interviews to translate user needs into system requirements
- Developed interactive prototype in Figma to guide software developers in implementing new UI behavior and features

UX Designer, Holcim   *Jan 2022 - Aug 2022*

- Designed a polygonal geofence feature to improve location accuracy of job site perimeters for ConcreteDirect app
- Moderated A/B testing with 5 customers and identified Version B to have fewer errors and faster task completion
- Ran segmented analysis of in-app surveys to identify user pain points, translated findings into UX recommendations

---

PROJECTS & PUBLICATIONS

EpiPen Redesign to Prevent Accidental Injections, Masters Capstone

- Conducted preliminary analyses, cognitive walkthroughs, simulated-use testing and formative evaluation for EpiPen prototype with an integrated safety lock mechanism and visual dose tracking indicator to increase user confidence

Analysis of Online Robotics Challenges, American Society for Engineering Education Conference

- Created a custom coding rubric with 18 metrics to qualitatively and quantitatively measure student learning and investigate solution diversity for 900+ student robot submissions, co-authored research paper on artifact analysis

---

ADDITIONAL INFORMATION

- Skills: Usability Testing, Use-Related Risk Analysis, IEC 62366, Technical Writing, UX Research, UX Design, CAD
- Software: Qualtrics, Excel, NVivo, Figma, SolidWorks, Fusion360, Vizcom, Miro, Lucidchart, Photoshop