Master Thesis - From Filters to Conversations: UX Design for Future Information Discovery in Engineering Systems (30 credits/20 weeks – 1-2 students)

About us

GKN Aerospace is the world's leading multi-technology tier 1 aerospace supplier. With 33 manufacturing locations in 12 countries, we serve over 90% of the world's aircraft and engine manufacturers. We design and manufacture innovative smart aerospace systems and components. Our technologies are used in aircraft ranging from the most used civil aircraft to the world's advanced 5th generation fighter aircraft and the Ariane orbital rockets used by ESA.

Project Background

GKN Aerospace engineers retrieve information from multiple systems and knowledge sources using search fields, filters, and navigation structures.

Generative AI and conversational interfaces introduce a natural-language alternative, but their use raises important UX questions about trust, transparency, user control, and explainability.

This thesis investigates the design principles needed when conversational interaction complements or replaces established information-retrieval methods.

Research Question

What UX design principles become particularly important when traditional filter-based information retrieval is replaced or complemented by AI-based conversational interaction, and why?

Objective

Identify, evaluate, and validate the UX design principles that enable effective transitions between traditional filter-based information retrieval and AI-powered conversational interaction.

Assignment Description

- Conduct a literature review on conversational search, engineering information retrieval, and human–AI interaction
- Perform user research through interviews, observations or workshops

- Identify user needs, pain points, and use cases
- Define UX principles for trust, transparency, explainability, user control, feedback, and error recovery
- Develop concepts that translate research findings into design solutions
- Create interactive prototypes in Figma or similar tool
- Evaluate concepts with engineers or domain experts and iterate them based on feedback
- Document and present findings as well as provide UX recommendations for future AI-supported engineering systems

The exact scope and methodology will be defined together with the students.

Location: Trollhättan, with hybrid work options available.

Qualifications

We are looking for one or two students pursuing a Master's degree in UX design, interaction design, human-computer interaction, product design, cognitive science, computer science with a human-centered design focus or related discipline.

Apply by

Please send your application, résumé, and portfolio to karin.eriksson@gknaerospace.com , preferably in PDF format.

Last date for application: 30 November 2026