



The Maker's Muse: Overcoming Creative Fatigue in Personal Fabrication

Background

Machines for personal fabrication (e.g., 3D printing, laser cutting) have become widely accessible and serve as powerful tools for creativity and personal expression. Users can design custom solutions for their own needs or leverage shared repositories like MakerWorld and Thingiverse. However, after the initial excitement of owning such devices wears off, many users experience creative fatigue and struggle to find ongoing, meaningful use cases. This thesis aims to research and develop a system that supports makers in the idea generation process, helping to sustain engagement, foster long-term creative use, and encourage continued skill-building in personal fabrication.

Approach

Through a review of existing literature on creativity support tools, maker culture, and HCI, core needs and design opportunities are identified. Based on these insights, a prototype system is developed to assist users in generating or finding relevant and personalized project ideas that meet their needs. The prototype could incorporate Mixed Reality technologies, artificial intelligence, or self-built hardware. The system is evaluated through user studies to assess its impact on creative engagement and sustained use of personal fabrication tools.

Contact



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Focus in this project

Personal Fabrication
Hardware/Software Prototype
User-Centered Design
User Evaluation