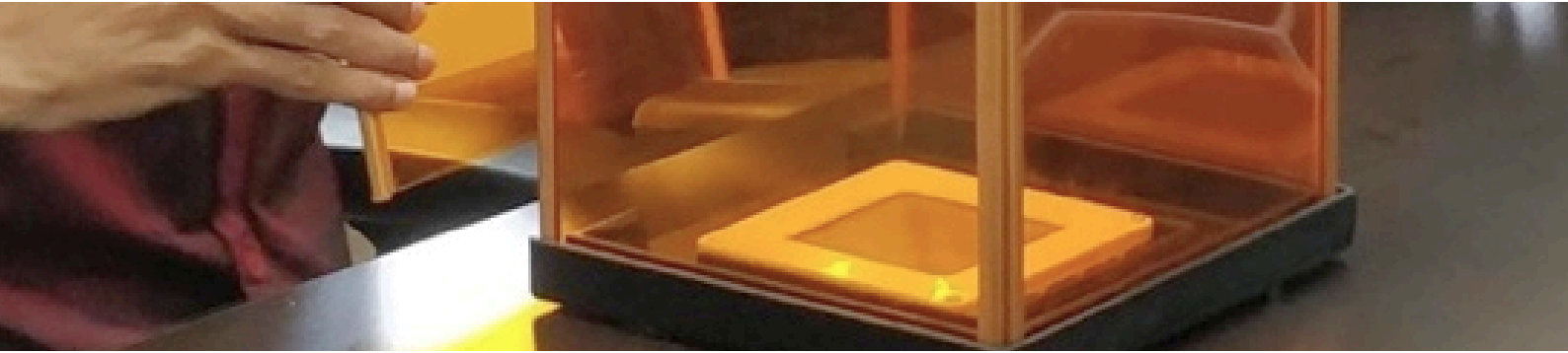


PRET Printer: Development and Evaluation of a Passive Refreshable Tactile Printer



About

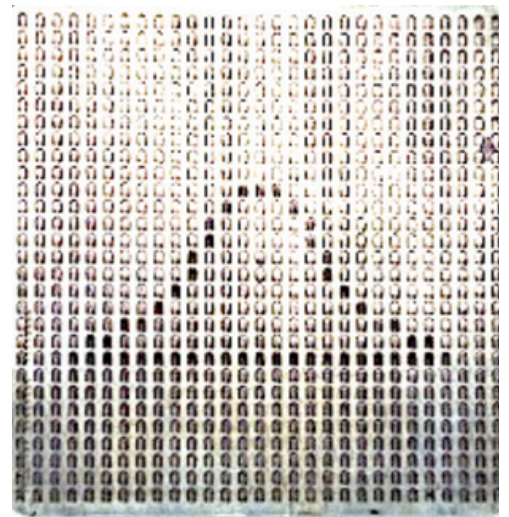
This study explores the development of the PRET Printer, a cost-effective solution for creating refreshable tactile graphics for visually impaired individuals. Using Tacilia technology and a laser engraver, it aims to improve access to diagrams, charts, and other visual information through tactile learning.

Development and Findings

The PRET Printer uses Tacilia technology, a Nitinol-based reconfigurable tactile display, with a laser engraver for precise graphics.

This study assessed the PRET Printer's effectiveness in creating tactile graphics. **Key findings include:**

- The PRET Printer **effectively created a range of tactile graphics**, enabling users to interpret diagrams and charts more easily.
- **User testing** with tactile learners **indicated high usability and effectiveness**, with participants reporting improved comprehension of graphical information.
- The method provides a **cost-effective and sustainable** alternative to traditional tactile media.



This study provides a foundation for future advancements in affordable and reconfigurable tactile graphics.

