

TACTILE BOOK

printing pictures for children
with visual impairments
by 3d printer



Tactile Picture Book Project

Tactile picture books are great for reading with young children. However, they are hard and time consuming to make. We believe 3D printing is an emergent method for simplifying the creation of tactile picture books.

Our vision is to enable parents of children with visual impairment to use **3D printers** to design and print tactile picture books to read with their children at home. The easiest way for a parent to create a 3D printed tactile book is to: 1) Select a book among regular children's books, 2) Capture an image of the page, 3) Send the image to a **3D printer**, and 4) Print a **3D tactile** model to read.

The research of the **Tactile Picture Books Project** is to investigate the scientific, technical, and human issues that must be addressed before this vision can be fully realized. For more information please visit:

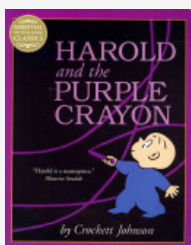
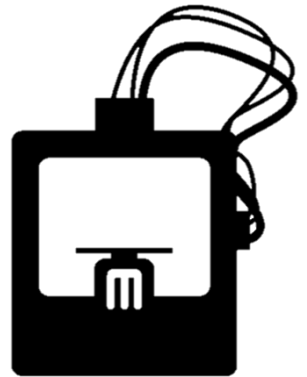
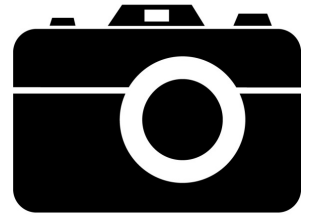
www.tactilepicturebooks.org

Rapid Prototyping Class (CSCI 4830/7000)

This computer science course trains students to utilize tools to **rapidly** create digital and tangible material. In one semester, students learn an array of tools and skills to design interface mockups, responsive web clients, web servers, mobile apps, and games. Students work in a collaborative, flipped classroom to help students learn these topics **rapidly**.

Students are challenged to select a book like **Harold and the Purple Crayon*** and to transcribe the book such that it can be touched and felt by visually impaired children. Each student designs one page, which is then brought together with all other pages to form a completed tactile book.

The tactile book exemplifies a collaborative and **rapid** effort to use 3D printing to make a tactile picture book and contributes to our broader vision.



*Harold and the Purple Crayon

By Crockett Johnson

Harold and the Purple Crayon is a children's book written by Crockett Johnson in 1955. This is Johnson's most popular book. It led to a series of other books and inspired many adaptations. Let Harold and his purple crayon lead you on a fantastic journey of the imagination. The beloved classic is now available as a tactile book, perfect for little hands at bedtime.**

**Reference: wikipedia.org

