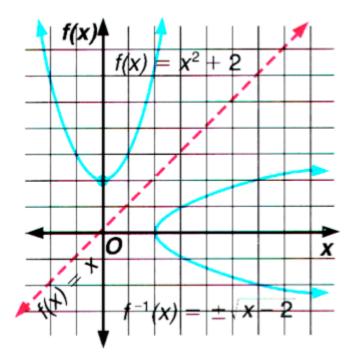
Placing QR codes on Tactile Graphics

Catie Baker, Lauren Milne, Kyle Rector

Motivation:

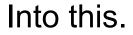
We want to turn this. . .



Advanced Mathematical Concepts, Precalculus with Applications by Gordon-Holliday, Yunker, Vannatta

Motivation:

We want to turn this. . .



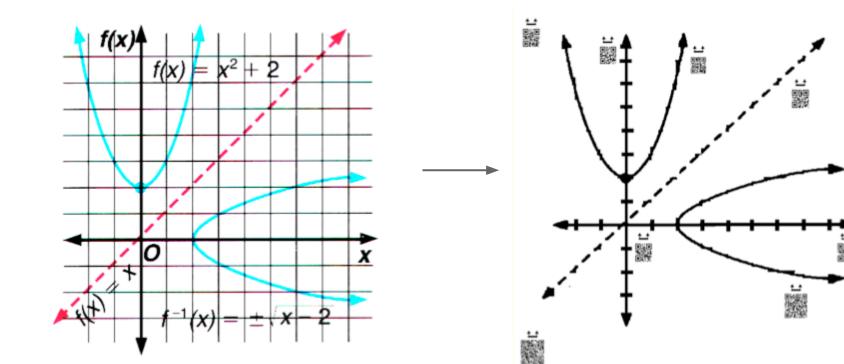
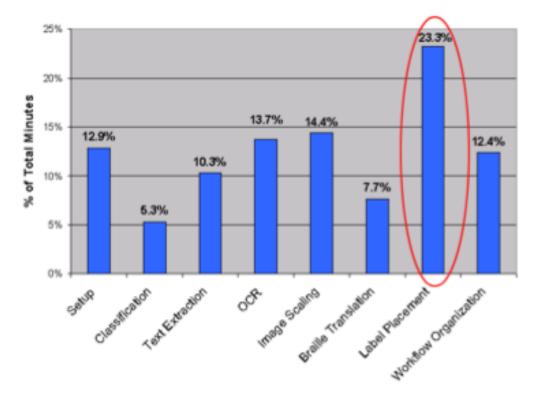


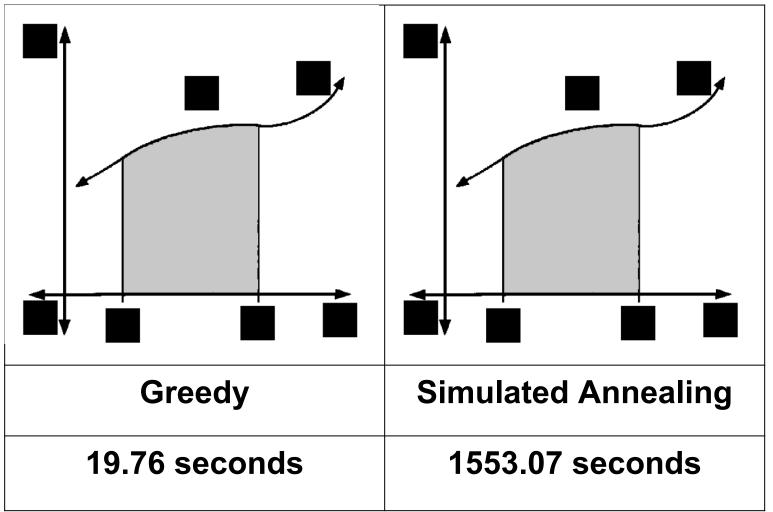
Image produced by Josh Scotland as part of the Tactile Graphics Project at the University of Washington

Labor needed for each step in the automated image translation process



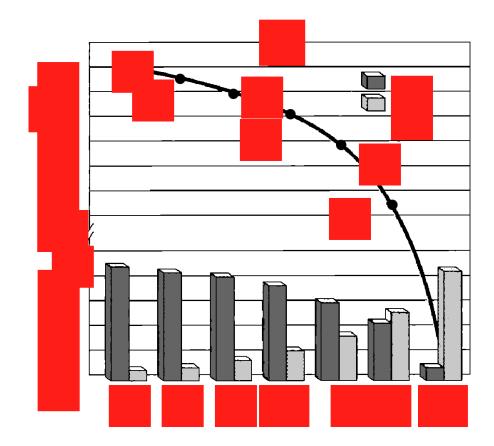
Chandrika Jayant, Matt Renzelmann, Dana Wen, Satria Krisnandi, Richard Ladner, and Dan Comden. 2007. Automated tactile graphics translation: in the field. In *Proceedings of the 9th international ACM SIGACCESS conference on Computers and accessibility* (Assets '07). ACM, New York, NY, USA, 75-82.

Algorithms

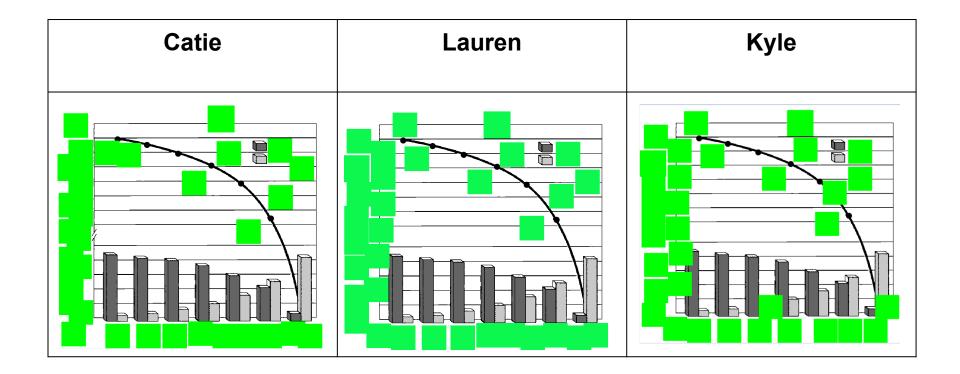


Christensen, Jon, Joe Marks, and Stuart Shieber. "Placing text labels on maps and diagrams." *Graphic Gems* 4 (1994)

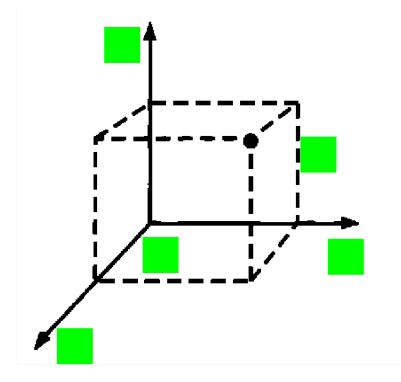
Initial Placement on the Slide:

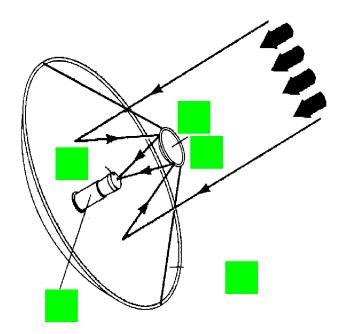


Evaluation Functions

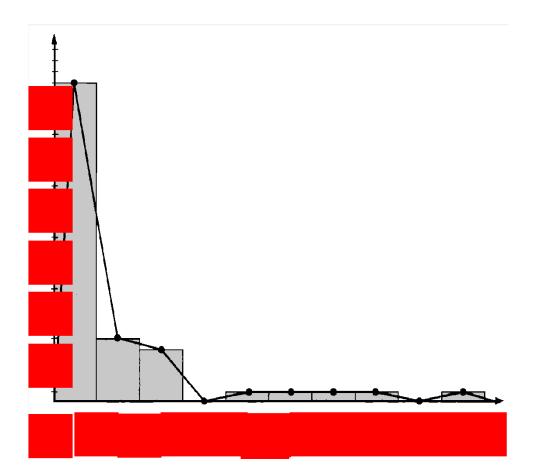


Works Well





Limitations/Future Direction



Division of Tasks



Parsed XML and TXT files and stored relevant information, wrote an evaluation function



Wrote Greedy Algorithm and evaluation function



Wrote Simulated Annealing and evaluation Function

Citations and Acknowledgements

Thanks to Richard Ladner for the idea, input and help.

All images not cited in their slide are based on Advanced Mathematical Concepts, Precalculus with Applications by Gordon-Holliday, Yunker, Vannatta and Crosswhite published by Glencoe/McGraw-Hill.