

**“Vision Without Execution is Delusion” -
Thomas Edison**

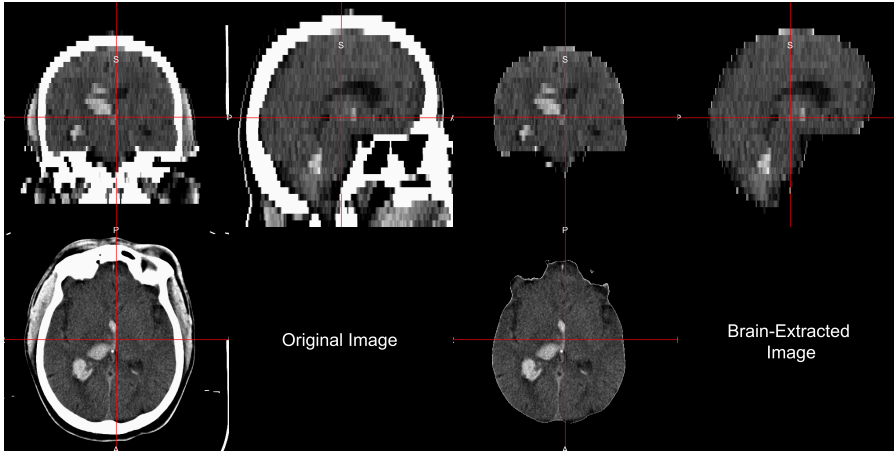
John Muschelli

December 7, 2015

CT Skull Stripping Goals

Want to go from this:

To This:



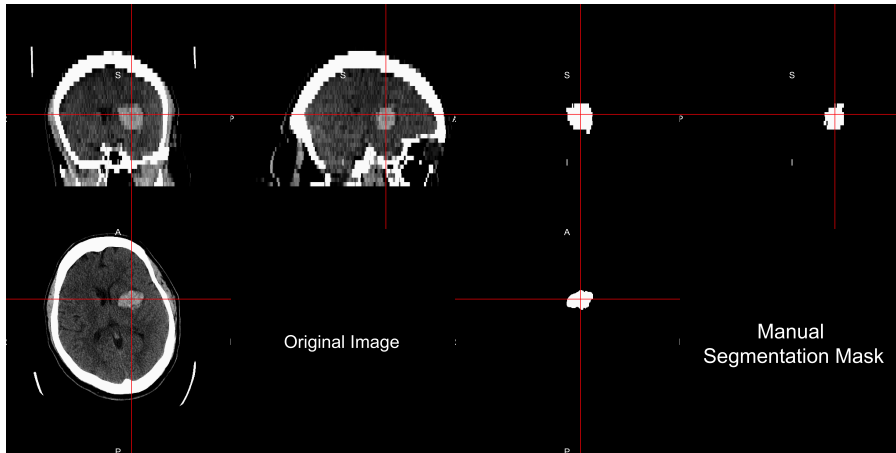
CT Skull Stripping How?

- ▶ Use stuff already out there for MRI
 - ▶ Brain Extraction Tool (BET), with some additional steps
- ▶ Package it in R
 - ▶ http://bit.ly/CTBET_RCODE
- ▶ Put code on Github (Bash code)
 - ▶ http://bit.ly/CTBET_BASH

Hemorrhage Segmentation

Want to go from this:

To This:



Hemorrhage Segmentation: How

- ▶ Make a bunch of predictors
 - ▶ Logistic Regression!
 - ▶ Random Forests!
 - ▶ LASSO!
 - ▶ GAM!
 - ▶ Find out what works!
- ▶ Make a Shiny App
- ▶ http://162.129.13.127/ich_predict/
- ▶ Make it easy for people (clinicians) to use

Overall

- ▶ Find simple methods that work
- ▶ Features matter
- ▶ If other people made something that works, try that first