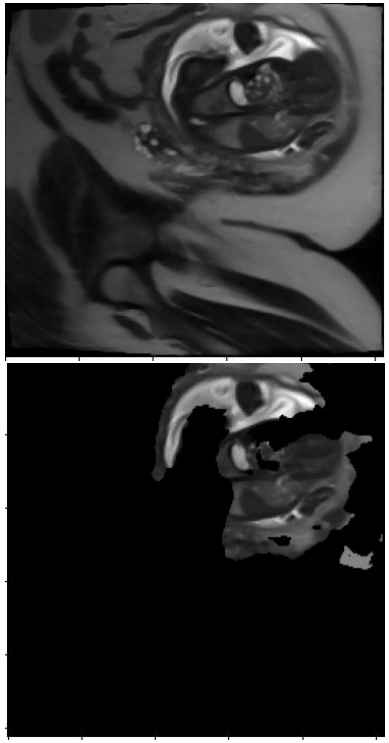
UTD-CISI Deep Learning AI Tools for Medical Imaging

Justin Jung Aryan Patel Sujay Karanam Subhayan Basu Leo Kuo Paul Ko

Goal: Implement a Deep Learning Model that segments the Placenta and Uterine Cavity in uterus MRI's of pregnant women. Create GUI, Web App, and Flywheel User Interface to allow a much easier and efficient usage of the model.



Approach: web applications paired with AR-based mobile app.

- Deep Learning Model implementation
- End-User GUI
- End-User web app
- Commercialized FLYWHEEL UI

Features:

- *GUI* - displays the placenta, uterus, and the original image
- *Flywheel UI* – Commericalizes the model and allows easier access
- *U-net model* – Neural Network for image segmentation tasks(identify placenta and uterus in an image)
- Web application - Upload DICOM file and displays the placenta and uterus.