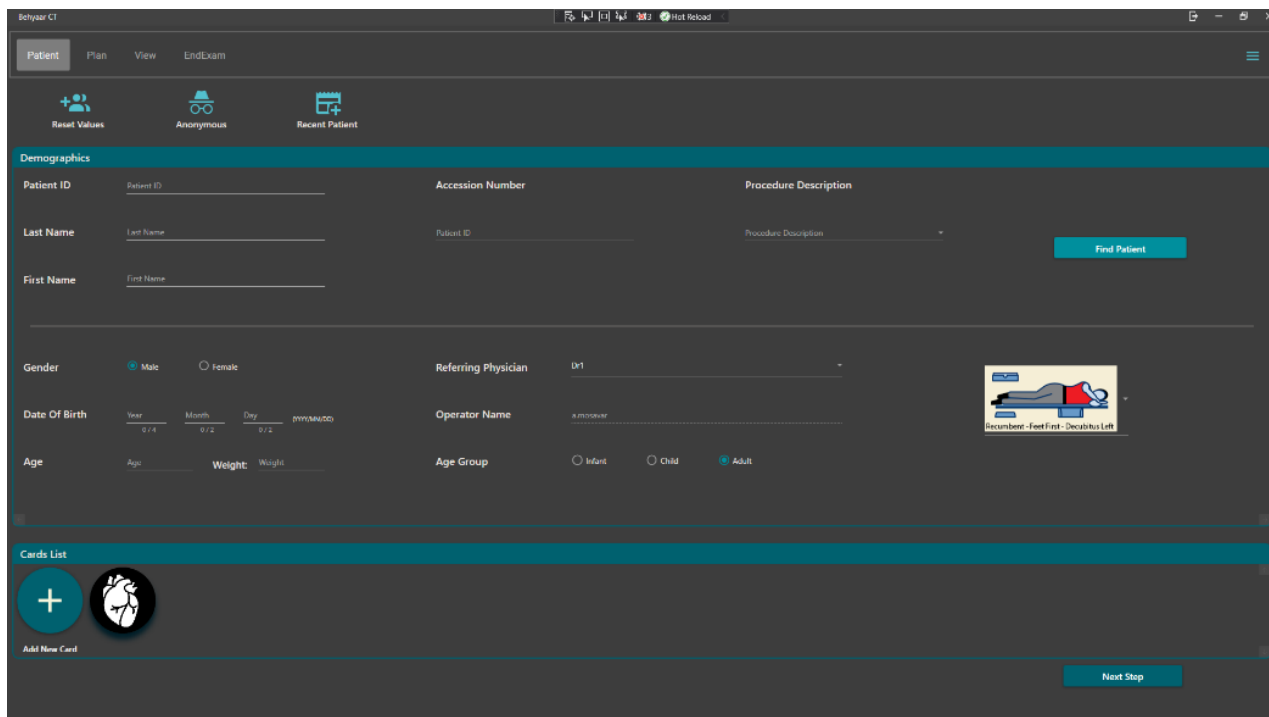
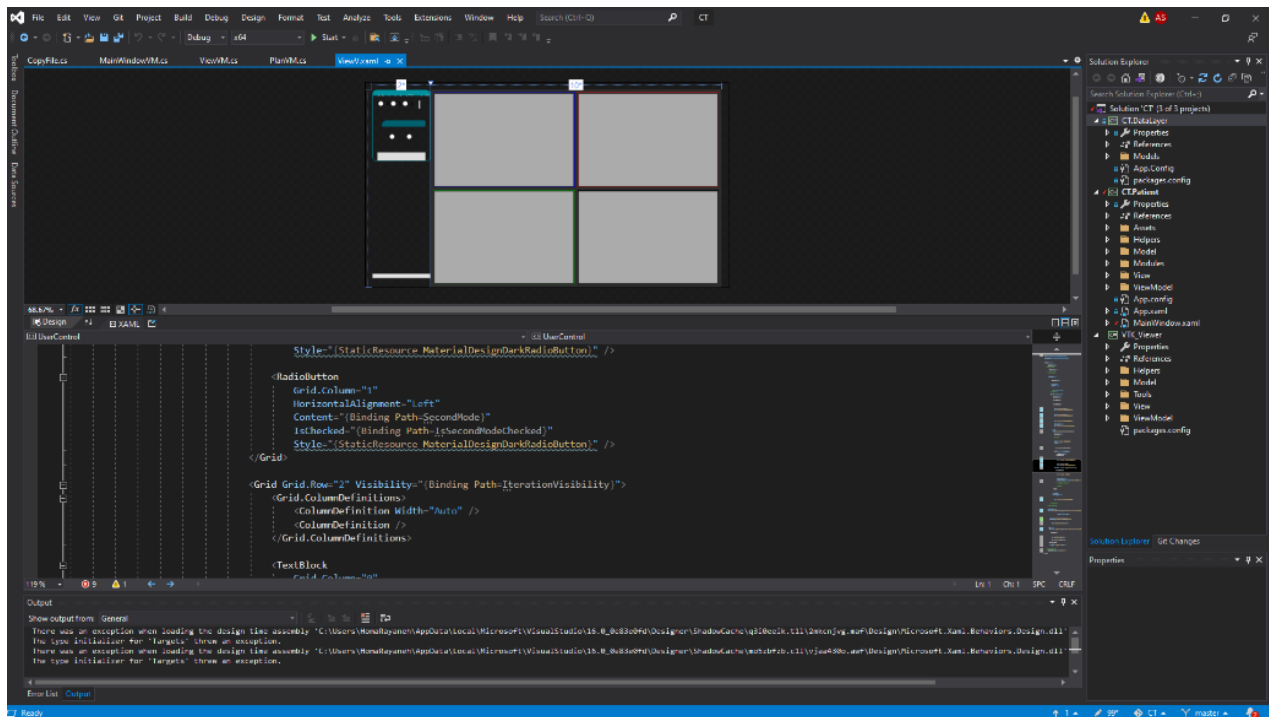
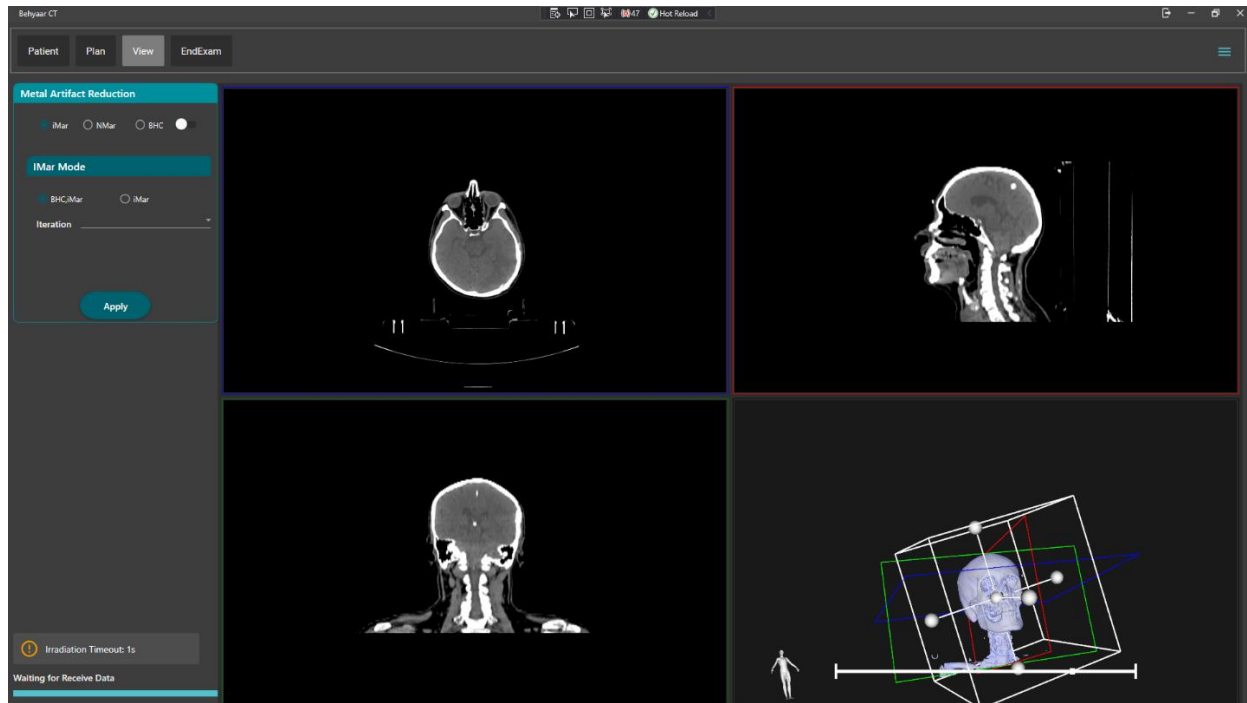


1. CT Scan Software & Reconstruction:





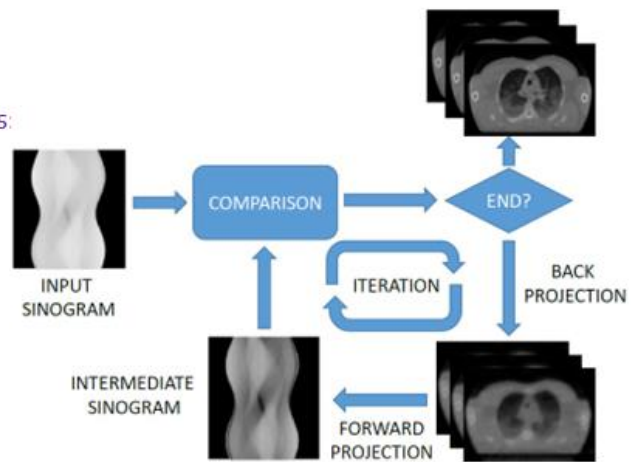
Algorithms

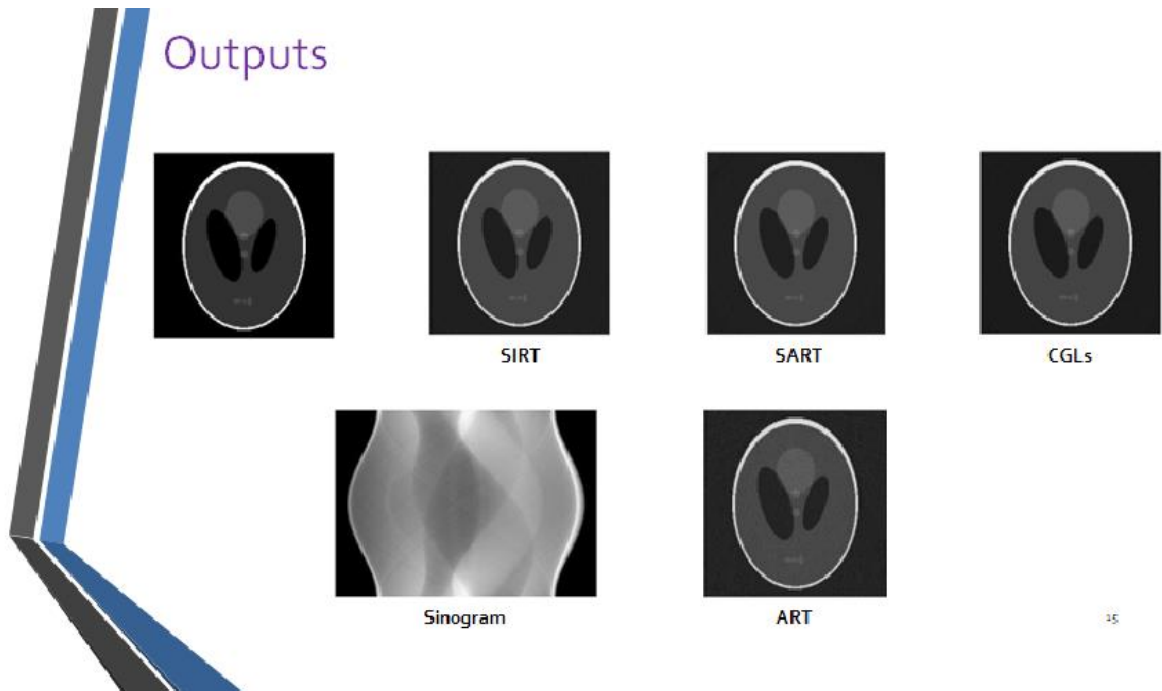
CPU Algorithms:

- FP
- BP
- FBP
- SIRT
- SART
- ART
- CGLS

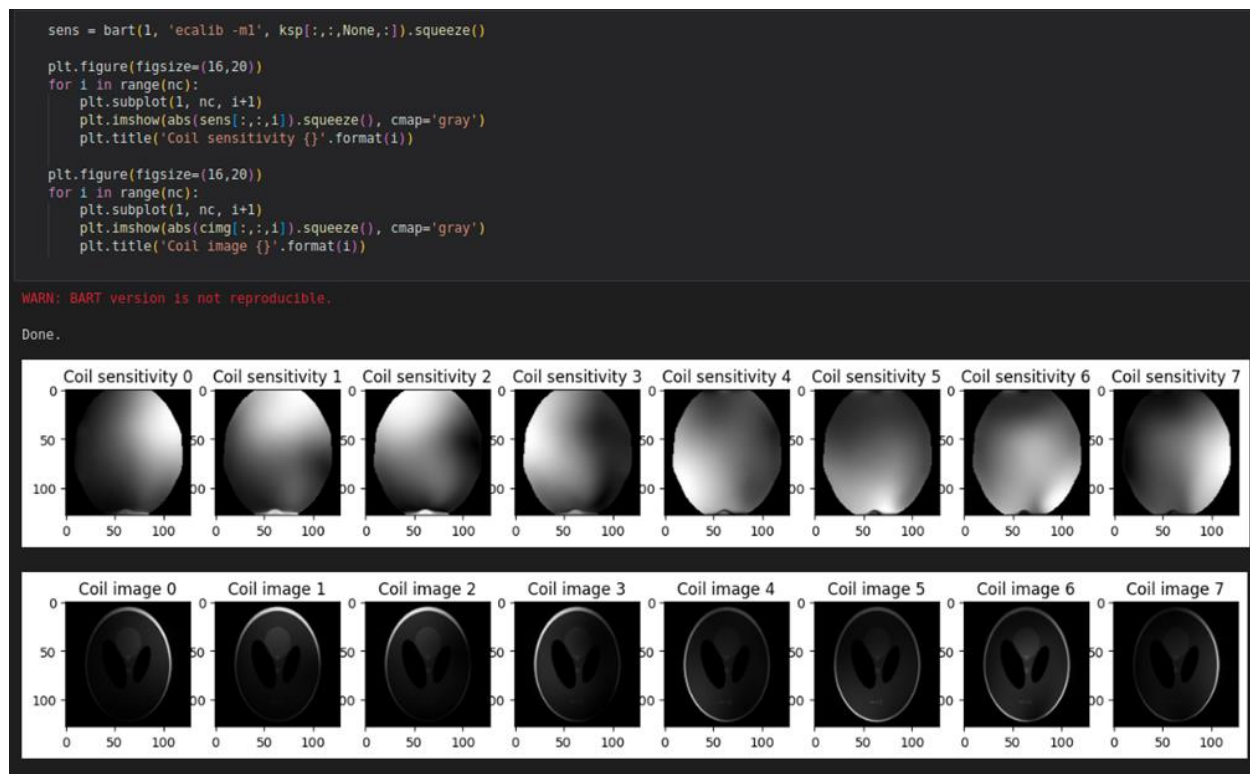
GPU Algorithms:

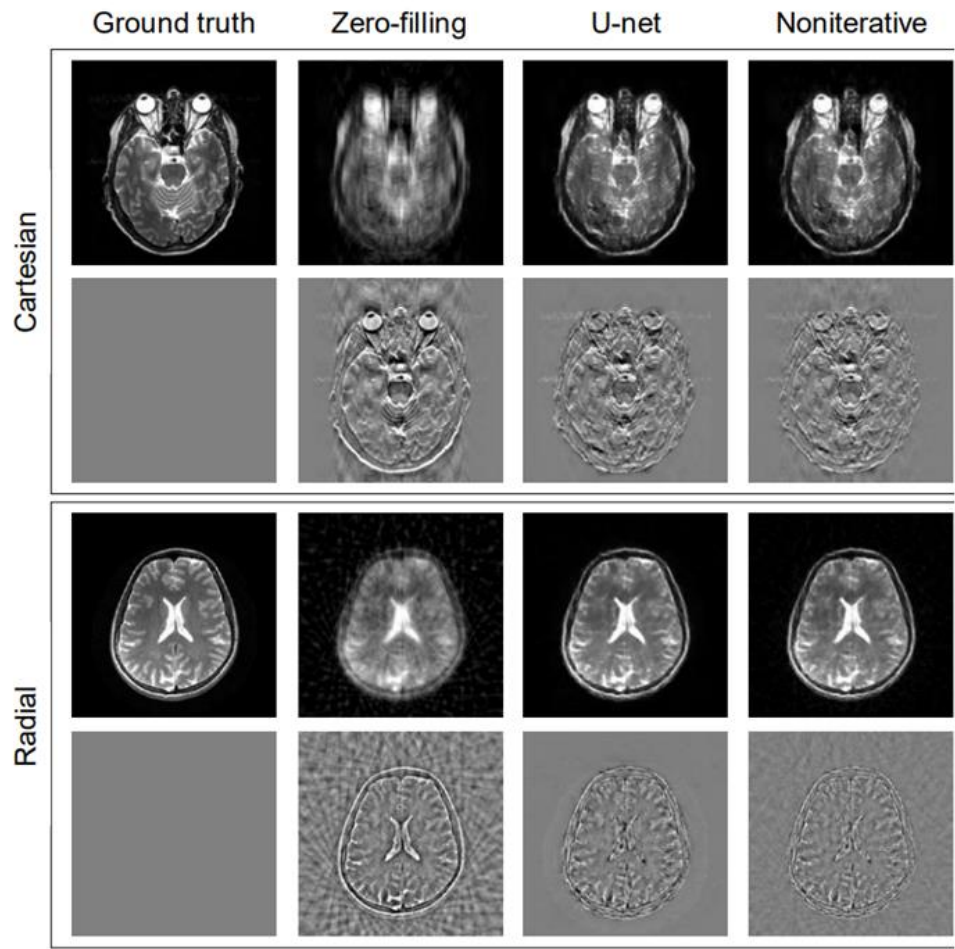
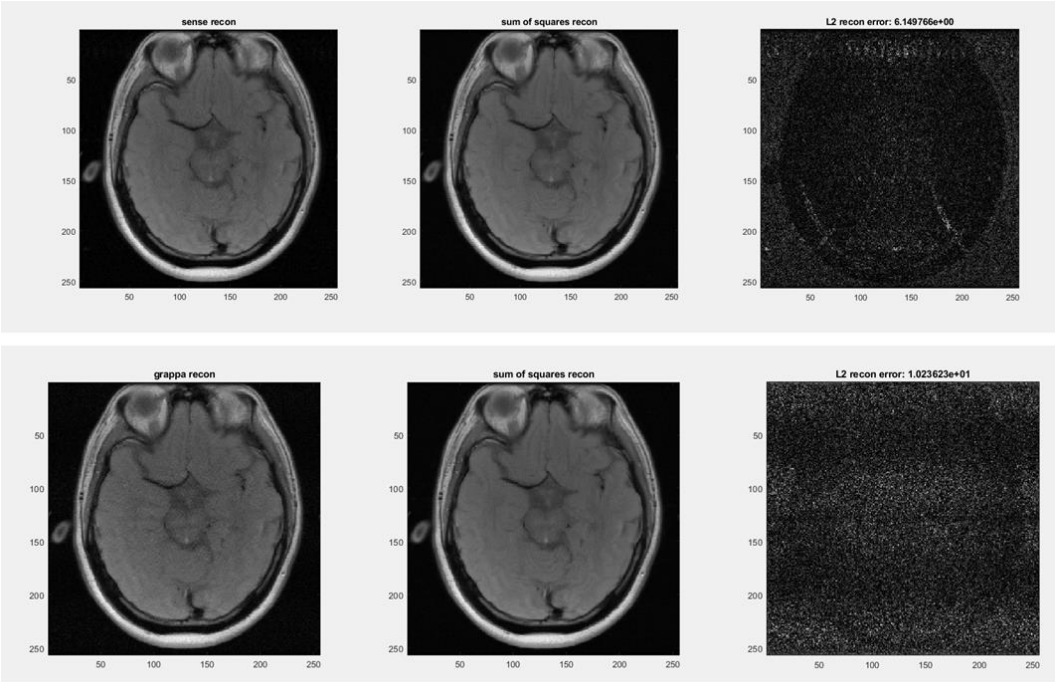
- FP
- BP
- FBP
- SIRT
- SART
- CGLS



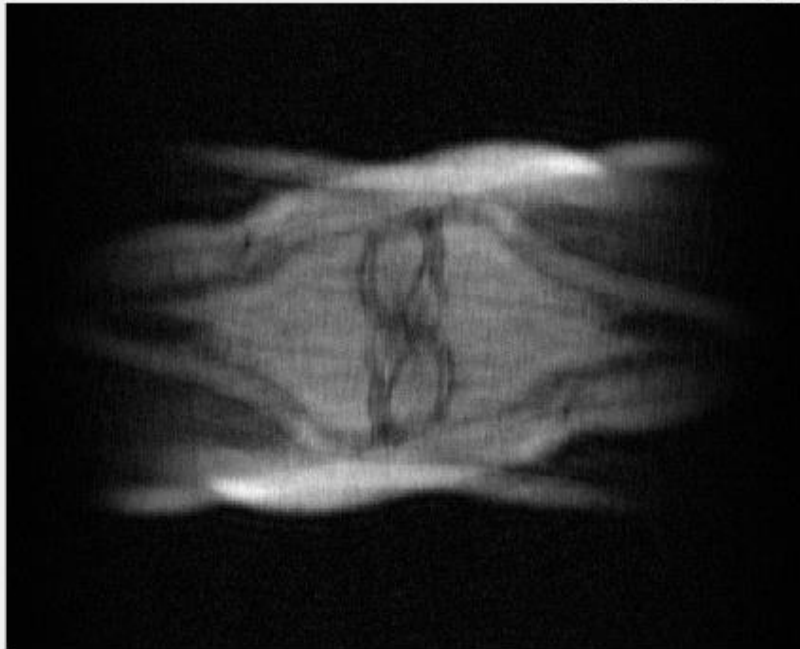


2. MRI Reconstruction:

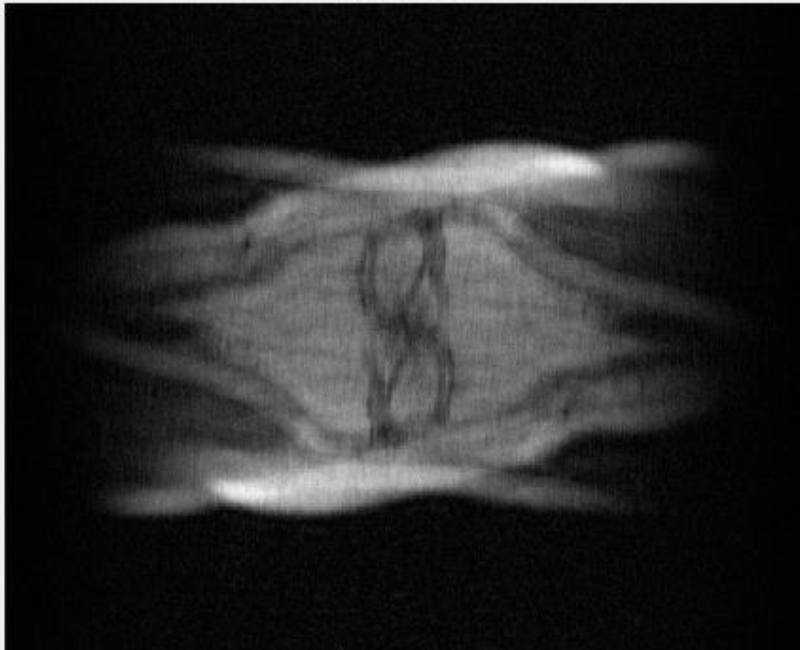




Real

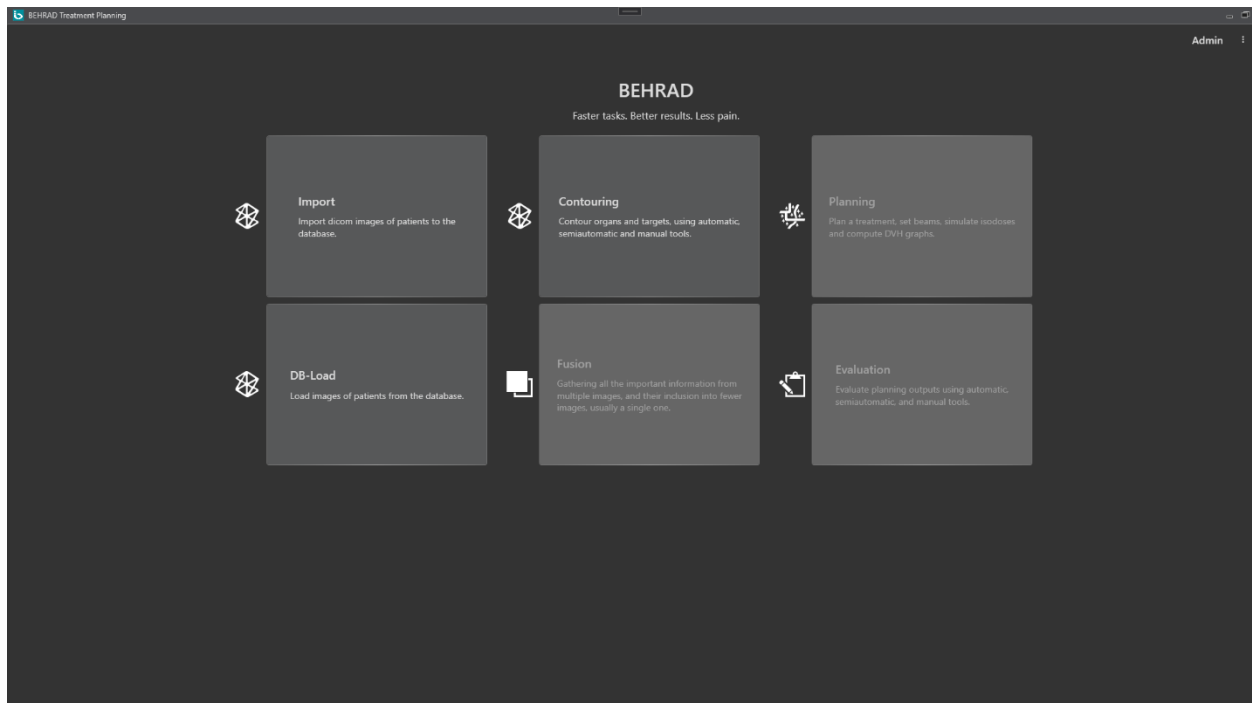
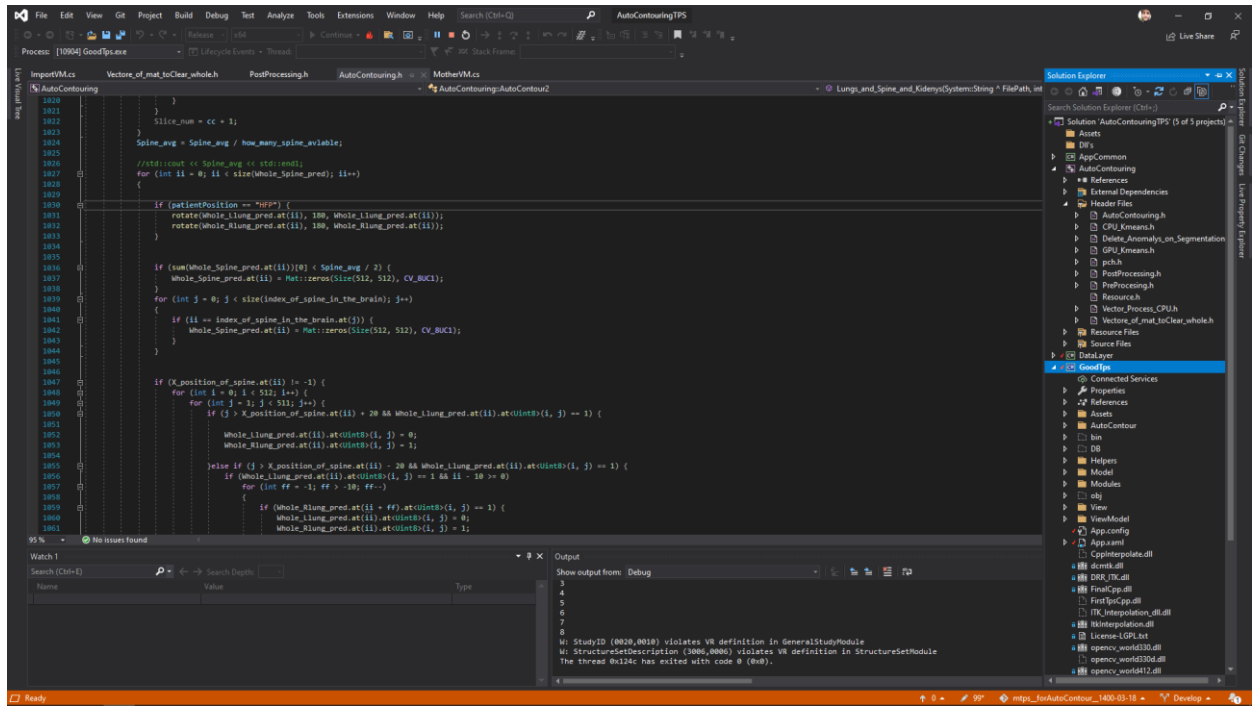


Imaginary



3. Treatment Planning System (TPS):





Load Patient

ProFilters

Patient ID:

Full Name:

From Date:

To Date:

Targets:

Drop a column header and drop it here to group by that column

Patient ID	T	Full Name	T	Import Date	T	Target Region	T	Position	T	ImageNo	T	RTStructNo	T
990410-BREAST		RAZEH GOUKEH*OZRA		12/31/2022 5:38:15 PM				HFS		76		1	
1149917		ABEDI NASRIN		12/21/2022 5:19:52 PM				HFS		74		1	
1149248		KARIMI*MARVAM		12/21/2022 5:03:13 PM				HFS		67		1	
1251931		MOAFI*MAH ROOZ		12/21/2022 4:53:07 PM				HFS		121		1	
1339883		NAGHDI BOKI KANKAVI*S.NABAT		12/21/2022 4:51:12 PM				HFS		76		1	
1160314		NOORI*AZADEH		12/21/2022 4:44:34 PM				HFS		76		1	
1464250		LOTFI*KOLSUM		12/21/2022 4:37:31 PM				HFS		80		0	
1168477		MOHSENI*SHABNAM		12/18/2022 6:21:16 PM				HFS		123		1	
1160418		JAVAN BAKHT*ALI AKBAR		12/18/2022 5:46:06 PM				HFS		109		1	
990601-brain		CHAVANDOR*FARAZALI		12/7/2022 9:59:30 AM				HFS		76		1	
1123229		HOSEINI SAKINE		12/5/2022 5:35:34 PM				HFS		71		1	
1169443		KHOSRAVI*MASOUD		12/4/2022 5:49:49 PM				HFP		55		1	
990520-BREAST3		ASHRAFI*MAHNAZ		10/30/2022 11:01:24 AM				HFS		73		1	
1182475		SOLEYMANI TABAS*KEYRONESA		10/27/2022 2:47:11 PM				HFS		85		1	
990617-BREAST3		ASGHARI PAKSIYANI*FARNOSH		10/27/2022 11:52:45 AM				HFS		69		1	
990617-HDG		SEDIKHI NAJME		10/27/2022 11:49:32 AM				HFS		85		1	
9902223-breast		ESMAEILI NIANI*MARZIVEH		10/27/2022 11:48:29 AM				HFS		67		1	
991017-neck-3		BABAEI*BEHROOZ		10/27/2022 11:47:17 AM				HFS		45		1	
991017-NECK		MOZAFARI PARVIZ		10/27/2022 11:45:34 AM				HFS		74		1	
990521-BREAST2		ALIGHANEI*PORANDOKHT		10/27/2022 11:43:23 AM				HFS		72		1	

Selected Scan Images

Main Menu

Index Range:

Index: Page Size:

Enter Contouring

Enter Planning

A. Fusion:

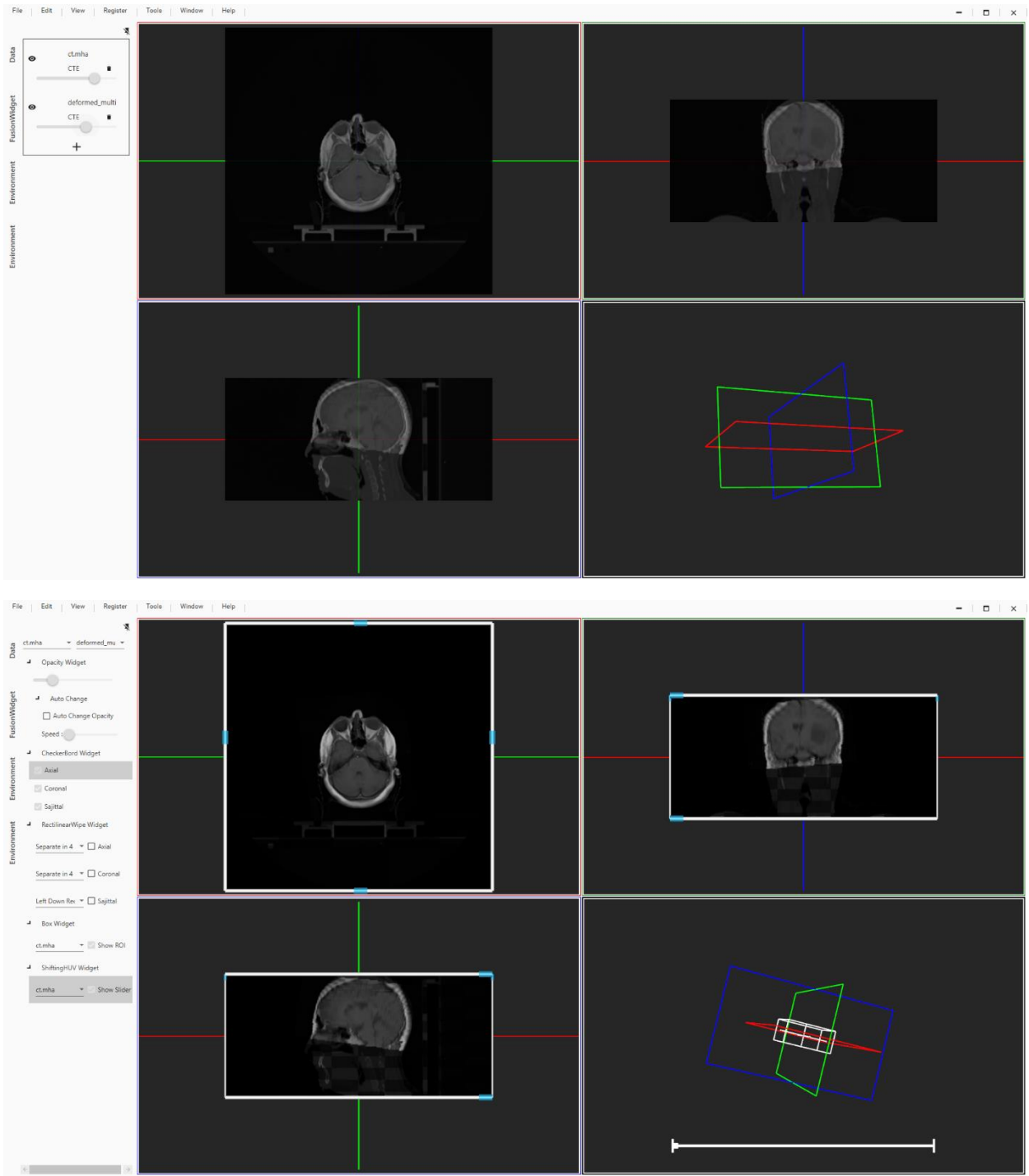
File | Edit | View | Register | Tools | Window | Help

Data

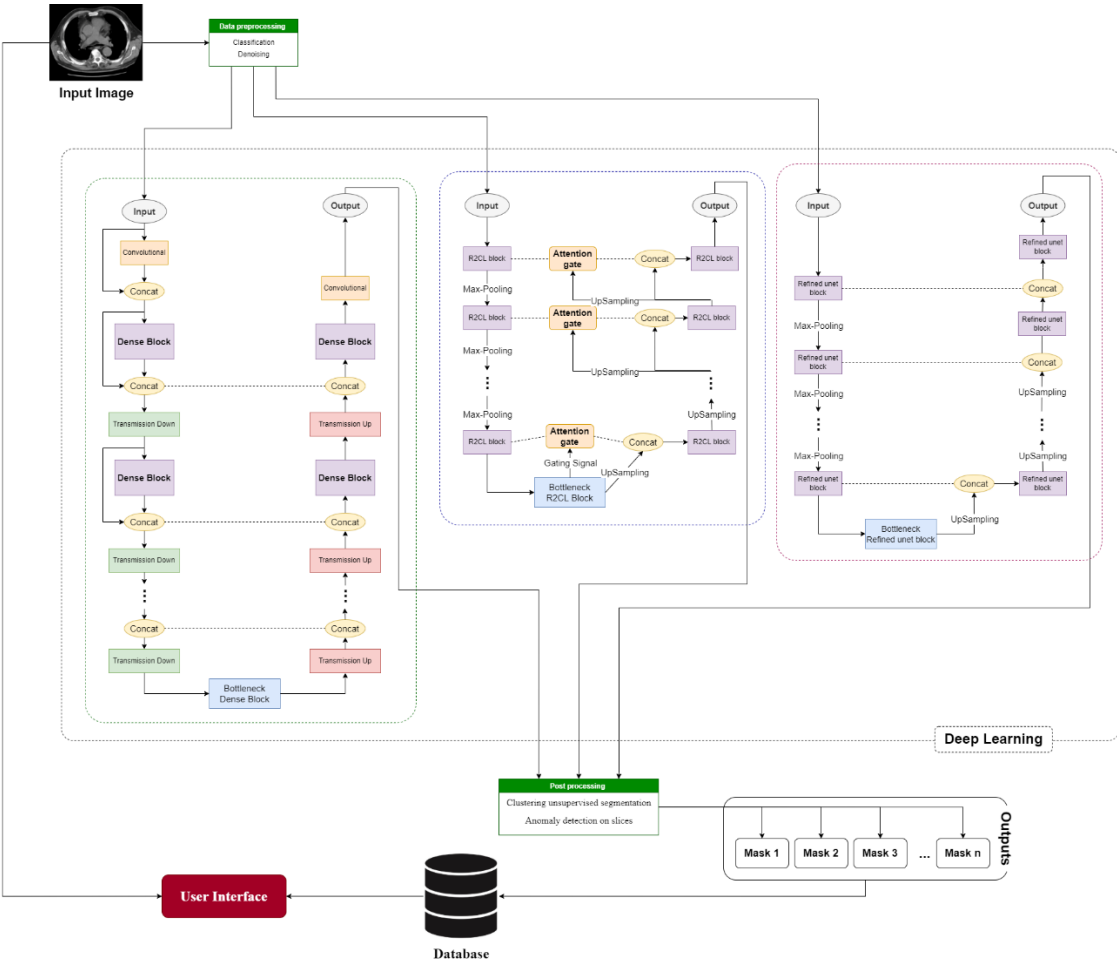
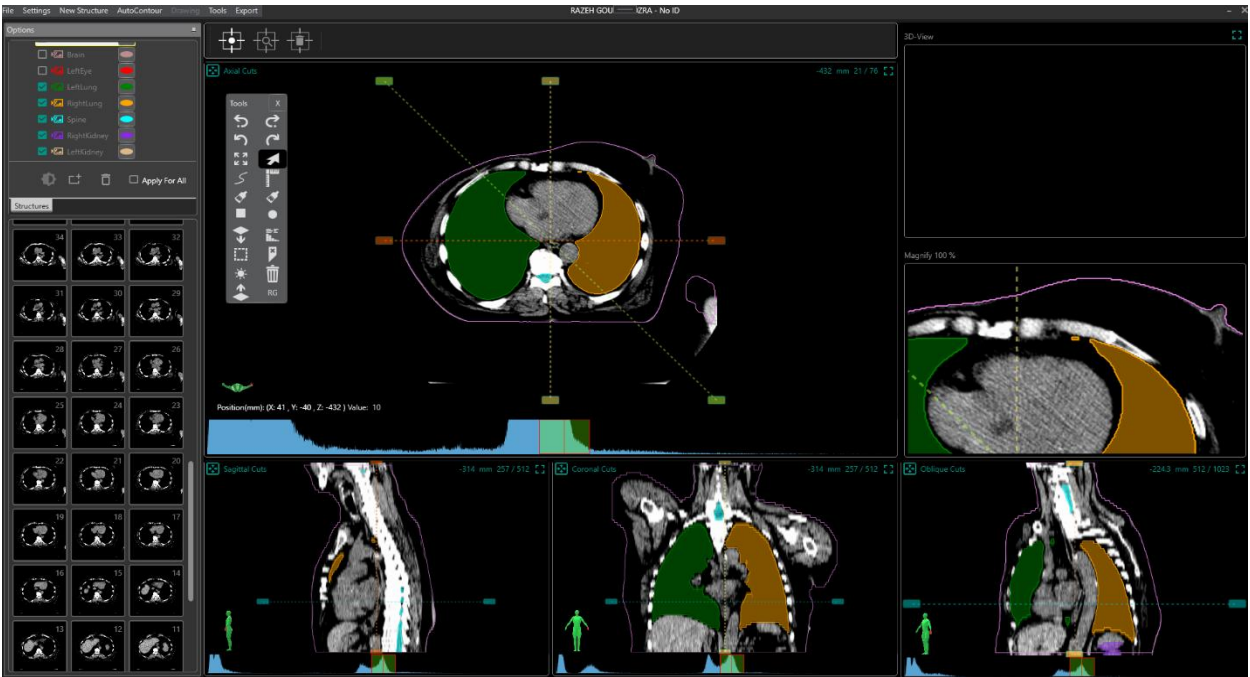
FusionWidget

Environment

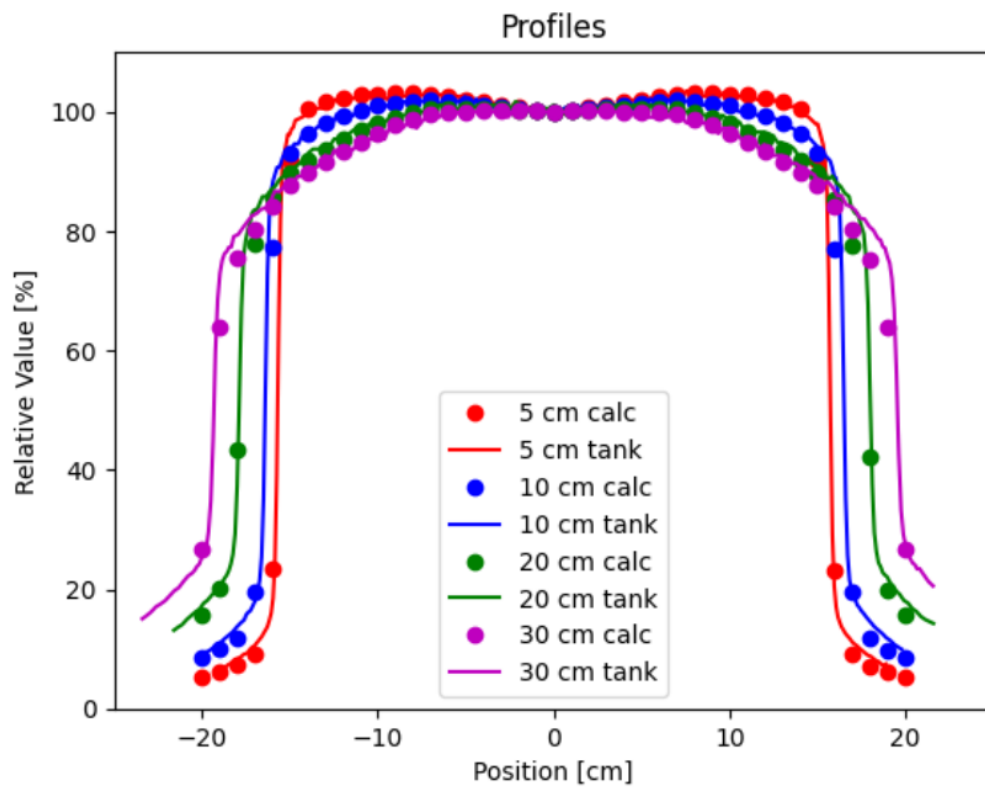
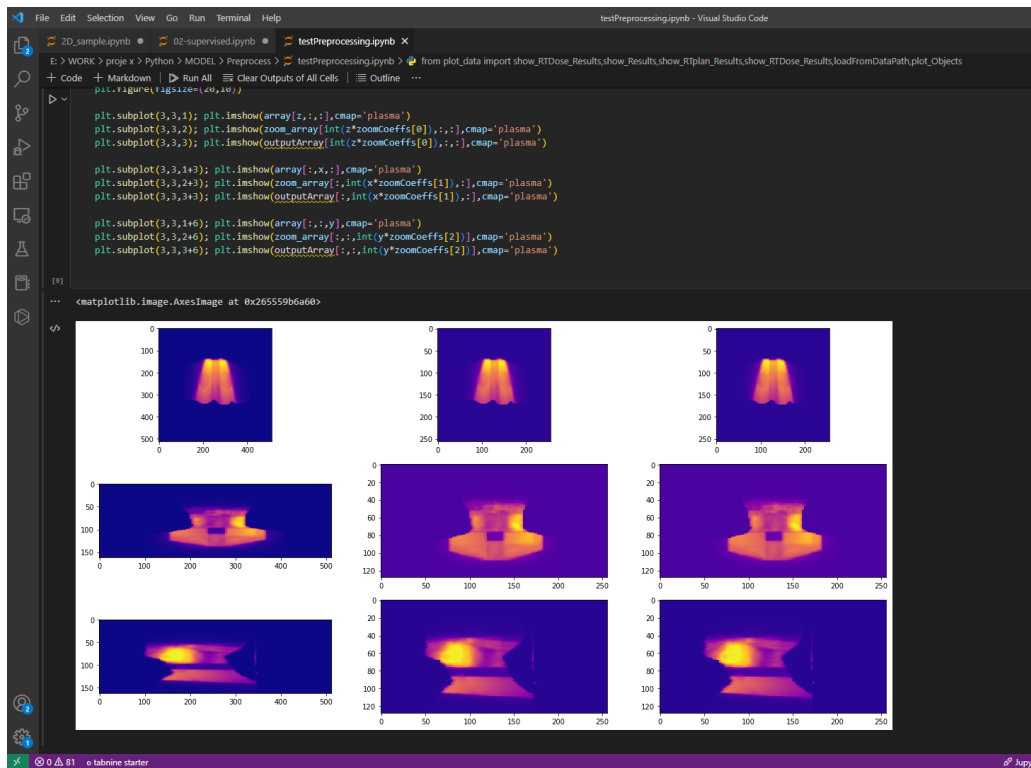
Environment

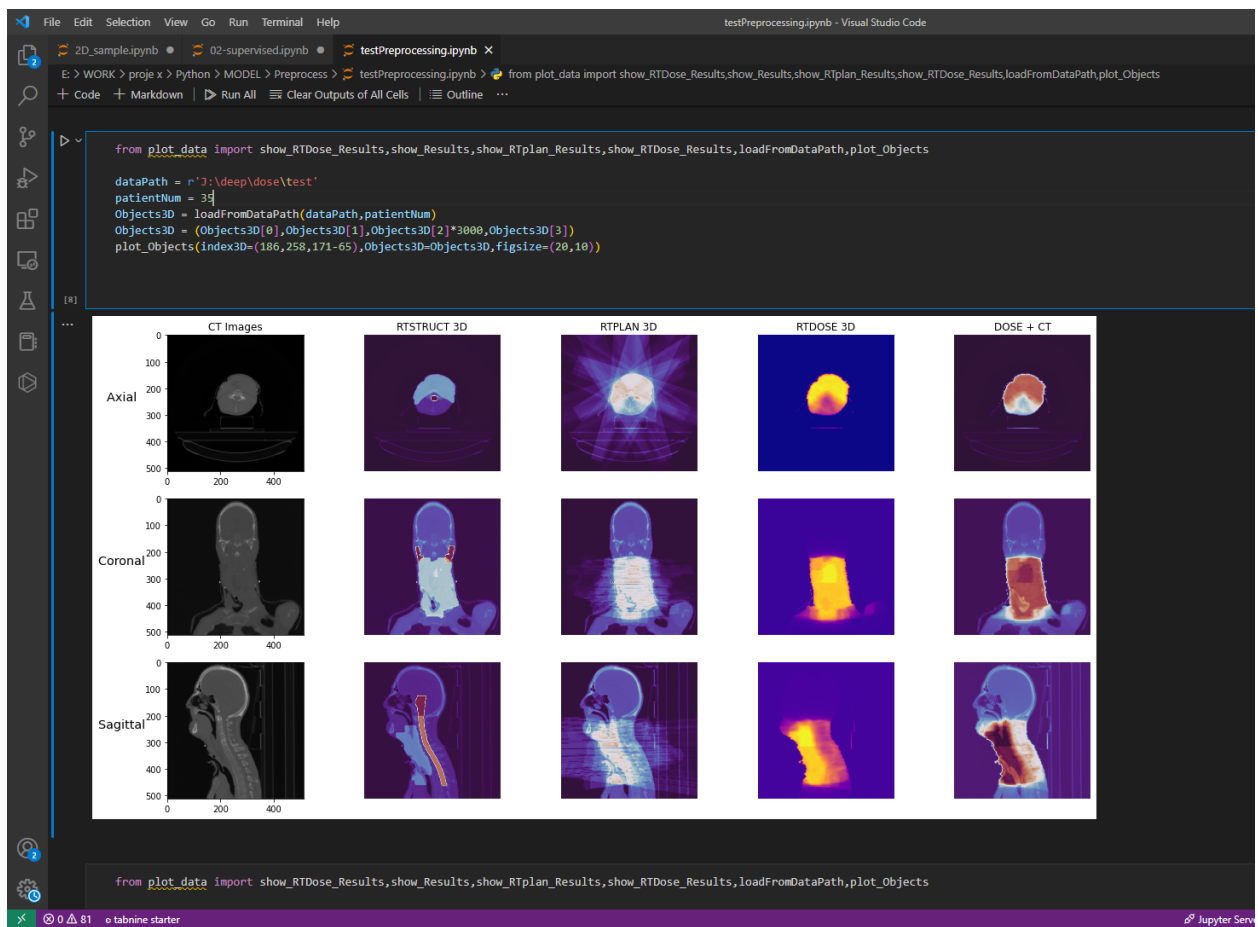
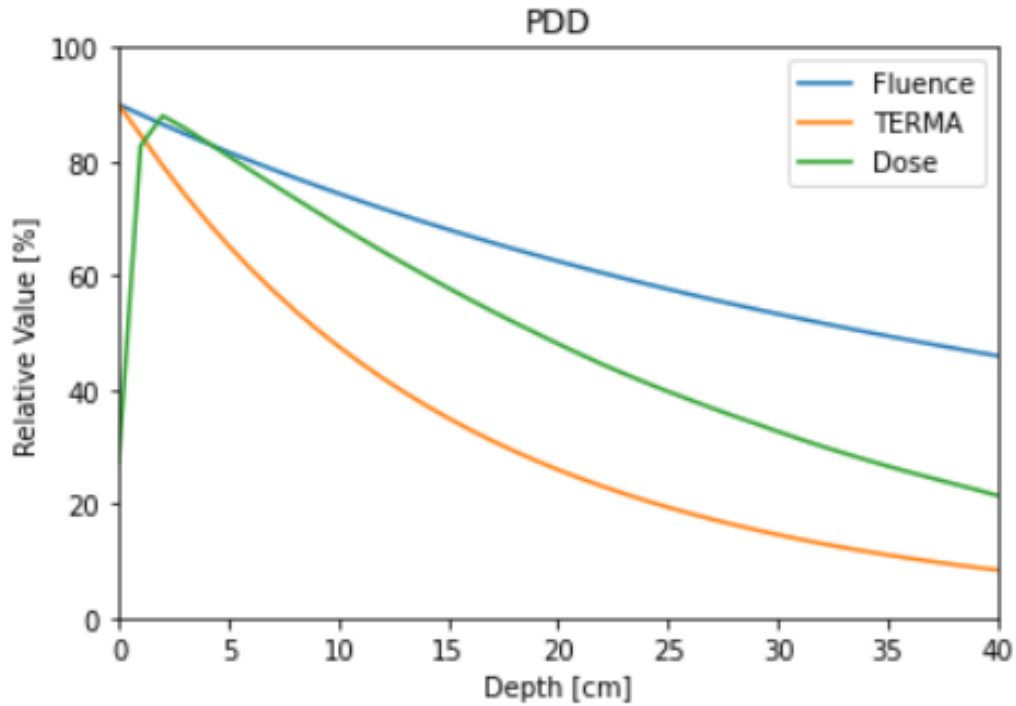


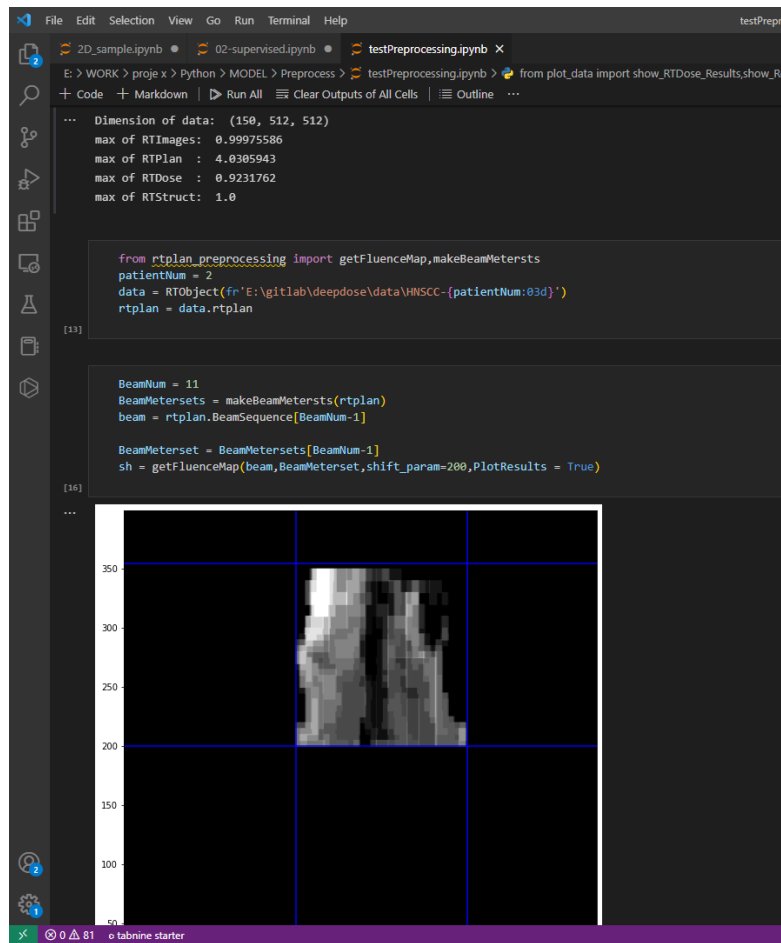
B. Contouring:



C. Dose Calculation



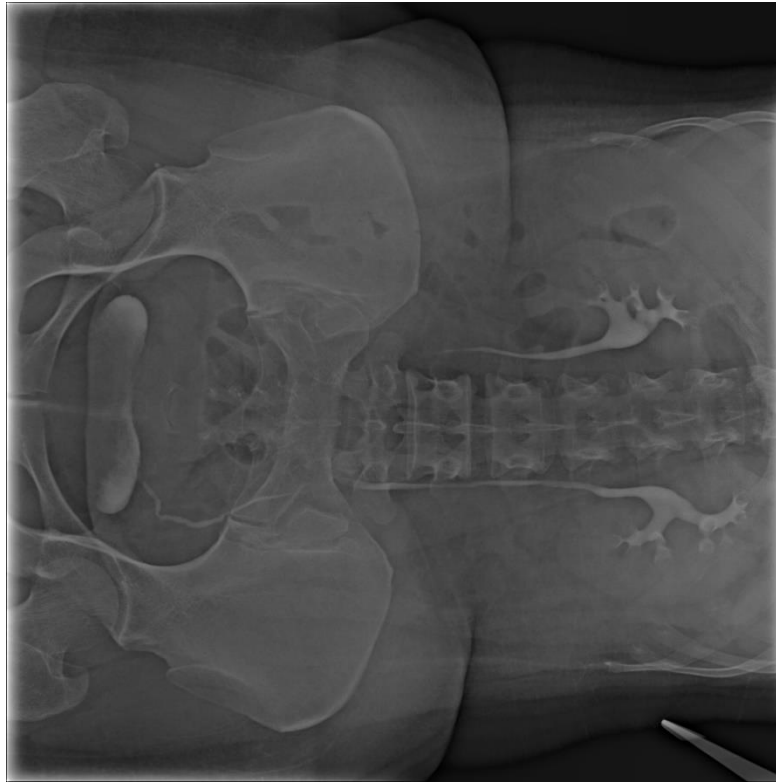




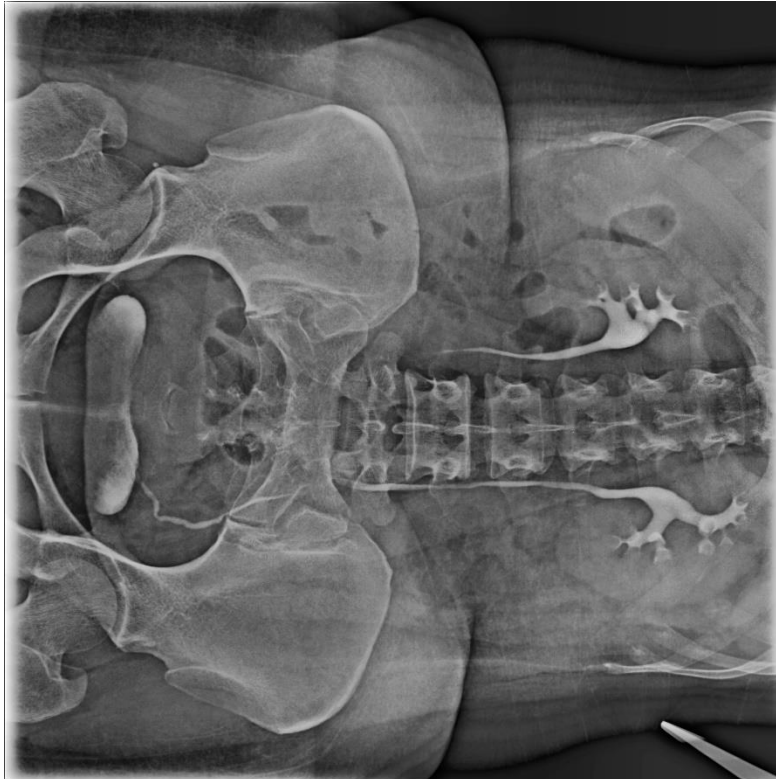
4. Radiology Software & Enhancements:







‘Before Enhancement’



‘After Enhancement’

5. Cargo Scanner Software

File Edit Selection View Go Run Terminal Help

2D_sample.ipynb 3D_sample.ipynb w-net.ipynb show some trucks.ipynb

E: > WORK > ALL > dualReadings > code W-net > show some trucks.ipynb > from PIL import Image

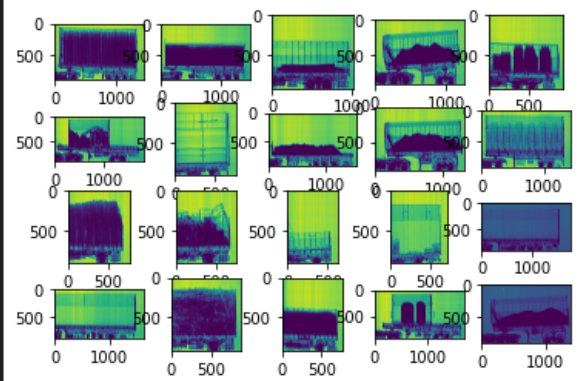
+ Code + Markdown | ▶ Run All | Clear Outputs of All Cells | Outline ...

```

idx = 50
for i in range(1,21,1):
    im_h = Image.open(os.path.join(direc,'{}/HighImageMain.tiff'.format(idx+i)))
    imarray_high = normalize(np.array(im_h))
    plt.subplot(4,5,i)
    plt.imshow(imarray_high)

```

[13]



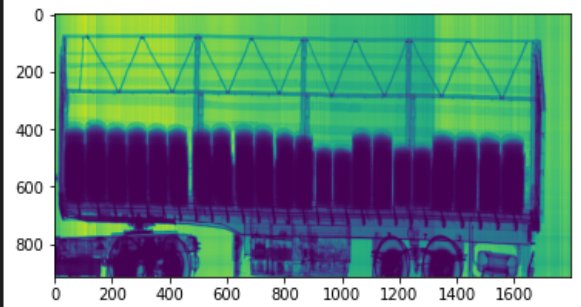
```

im_h = Image.open(os.path.join(direc,'{}/HighImageMain.tiff'.format(4588)))
imarray_high = normalize(np.array(im_h))
plt.imshow(imarray_high)

```

[19]

<matplotlib.image.AxesImage at 0x24b15542a60>



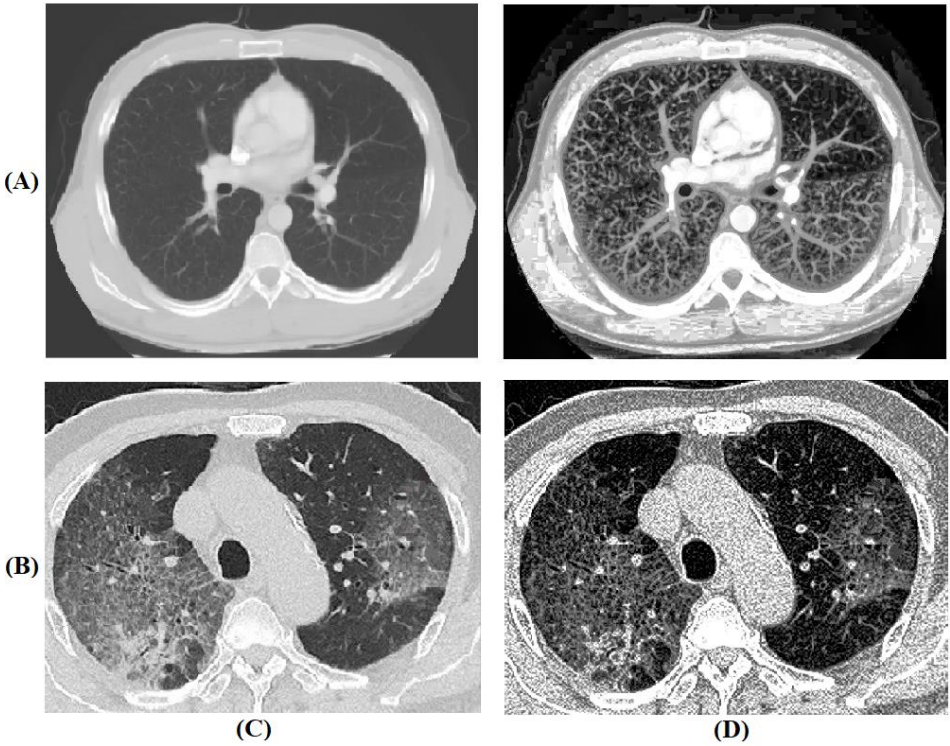
```

import tensorflow as tf
print(tf.__version__)
tf.config.list_physical_devices()

```

4 71 tabnine starter

6. COVID-19 Diagnosis



Training Confusion Matrix

Output Class	0	289 55.4%	6 1.1%	98.0% 2.0%
	1	1 0.2%	226 43.3%	99.6% 0.4%
		99.7% 0.3%	97.4% 2.6%	98.7% 1.3%
		0	1	
		Target Class		

Validation Confusion Matrix

Output Class	0	58 51.8%	4 3.6%	93.5% 6.5%
	1	2 1.8%	48 42.9%	96.0% 4.0%
		96.7% 3.3%	92.3% 7.7%	94.6% 5.4%
		0	1	
		Target Class		

Test Confusion Matrix

Output Class	0	47 42.0%	8 7.1%	85.5% 14.5%
	1	0 0.0%	57 50.9%	100% 0.0%
		100% 0.0%	87.7% 12.3%	92.9% 7.1%
		0	1	
		Target Class		

All Confusion Matrix

Output Class	0	394 52.8%	18 2.4%	95.6% 4.4%
	1	3 0.4%	331 44.4%	99.1% 0.9%
		99.2% 0.8%	94.8% 5.2%	97.2% 2.8%
		0	1	
		Target Class		

