

Synthetic Data Pipeline for Pose Estimation (Milestone 4)

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Overview of Milestone 4

- Make x, y, z based on t instead of x
- Implement compatibility with Linux
- Added additional x, y, z information to output COCO file
- Meet with pose estimation team to get information about necessary updates and new capabilities

Milestone 4 Matrix

Task	William	Nate	Stephane	Hanibal	To Do
1. Validate that the angles generated are correct	28.95%	0%	33%	.05%	
2. Meet with Dr. White's team to get their opinions and test functionality for users.	50%	50%	0%	0%	
3. Start learning neural networks	0%	0%	0%	0%	No longer necessary
4. Add another function for flightpath in the TOML file so we can support non-linear changes in x.	0%	100%	0%	0%	
5. Incorporate linux compatibility	100%	0%	0%	0%	
6. Add position data to COCO file	0%	0%	0%	80%	Bug fixing

Loading Bar

- Shows how long it takes to generate each frame and how much longer it will take to generate all frames
- Used TQDM python package

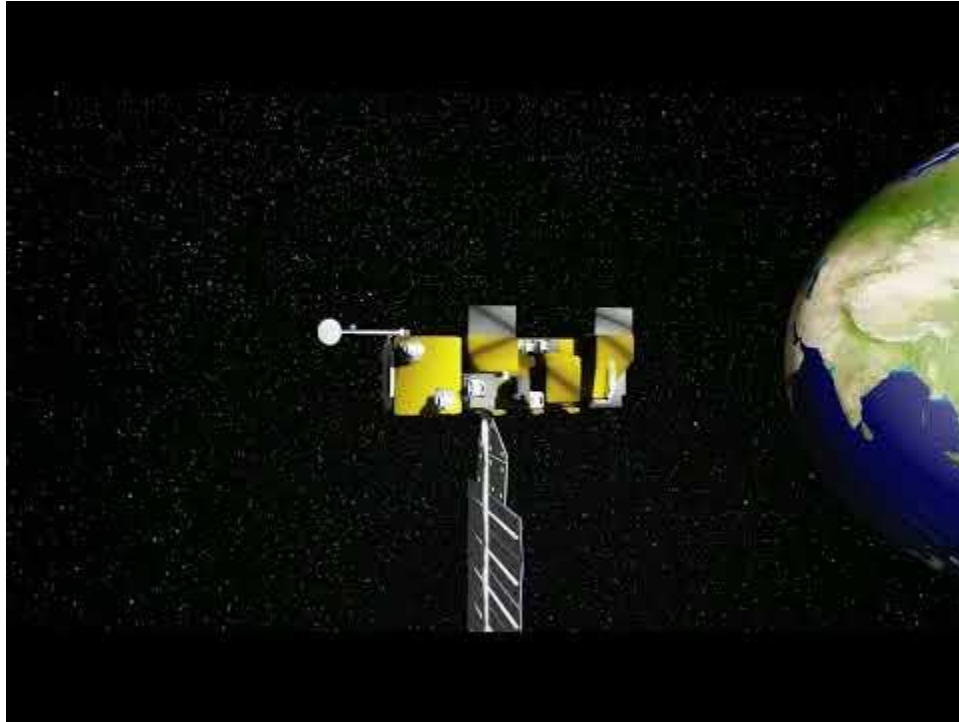
1% |

| 15/2400 [00:12<21:16, 1.87it/s]

Meeting with Dr. Whites team and goals for milestone 5

- Asked for additional uncertainty to satellite position
- Satellite movement that could go in a circle
- Add satellite movement options to the camera
- Attempt to accept stl files as models for satellite
- Enable background to move with camera

Sneakpeek Demo



Milestone 5 Matrix

Task	William	Nate	Stephane	Hanibal
1. Add additional lighting features	demo	dev	Test	test
2. Refactor code to change moment from the satellite to the camera	Dev	Test	Dev	test
3. Attempt to implement .stl files for satellite model	Dev	Test	Test	Dev
4. Make background pannable	Dev	Test	dev	demo

Questions?