Independent Research Project

Imperial College

Wave Propagation with Neural Network

Hao Lu

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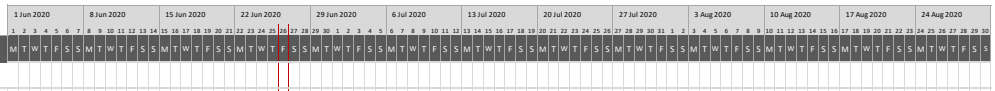

TASK	PROGRESS	START	END
Preparation			
Design and justify project compositions	100%	1/6/20	26/6/20
Review wave propagation problems	100%	1/6/20	4/6/20
Review numerical methods for wave propagation problems	100%	5/6/20	12/6/20
Learn to automate ANSYS simulations	100%	8/6/20	26/6/20
Review relevant machine learning papers	100%	12/6/20	26/6/20
Finishing project plan	100%	15/6/20	26/6/20
Data simulation			
Develop and test scripts in ANSYS for shock wave propagations	0%	27/6/20	4/7/20
Generate a small group of data to discuss and validate	0%	1/7/20	6/7/20
Massively generate data	0%	7/7/20	10/7/20
Developing Network			
Analyse generated data and pre-processing	0%	11/7/20	14/7/20
Develop network architecture	0%	15/7/20	23/7/20
Train and validate network	0%	18/7/20	31/7/20
Re-generate data if needed	0%	24/7/20	31/7/20
Test network	0%	1/8/20	3/8/20
Post processing and writing the report			
Compare with training data visually	0%	4/8/20	7/8/20
Compare with training data mathematically	0%	8/8/20	11/8/20
Analyse and write the report	0%	11/8/20	23/8/20
Review the report and final check	0%	24/8/20	28/8/20
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