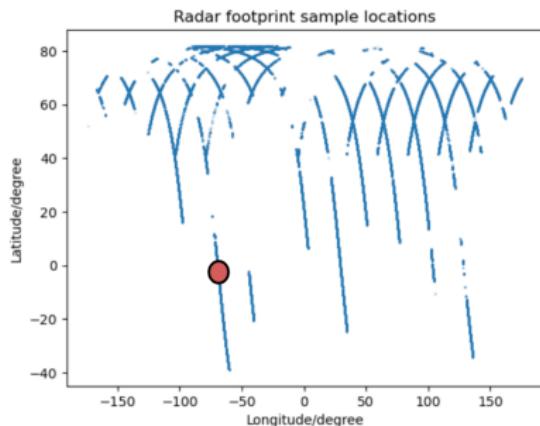


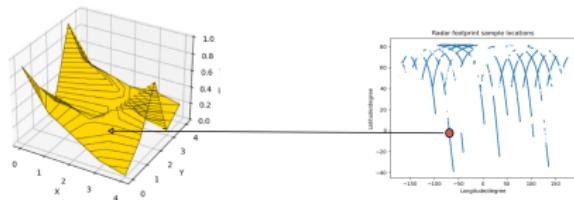
Generalized Additive Models for Ground Clutter Regression in CloudSat Radar Profiles: A Convolutional Neural Network As a Basis Function

Ding Li
20866008
MMATH in Computational Mathematics
STAT844, Spring 2024

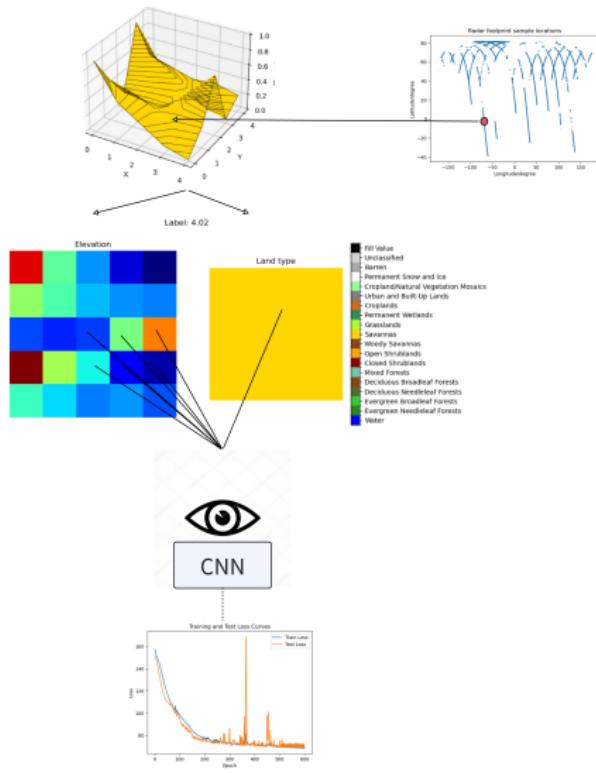
Background and Methodology



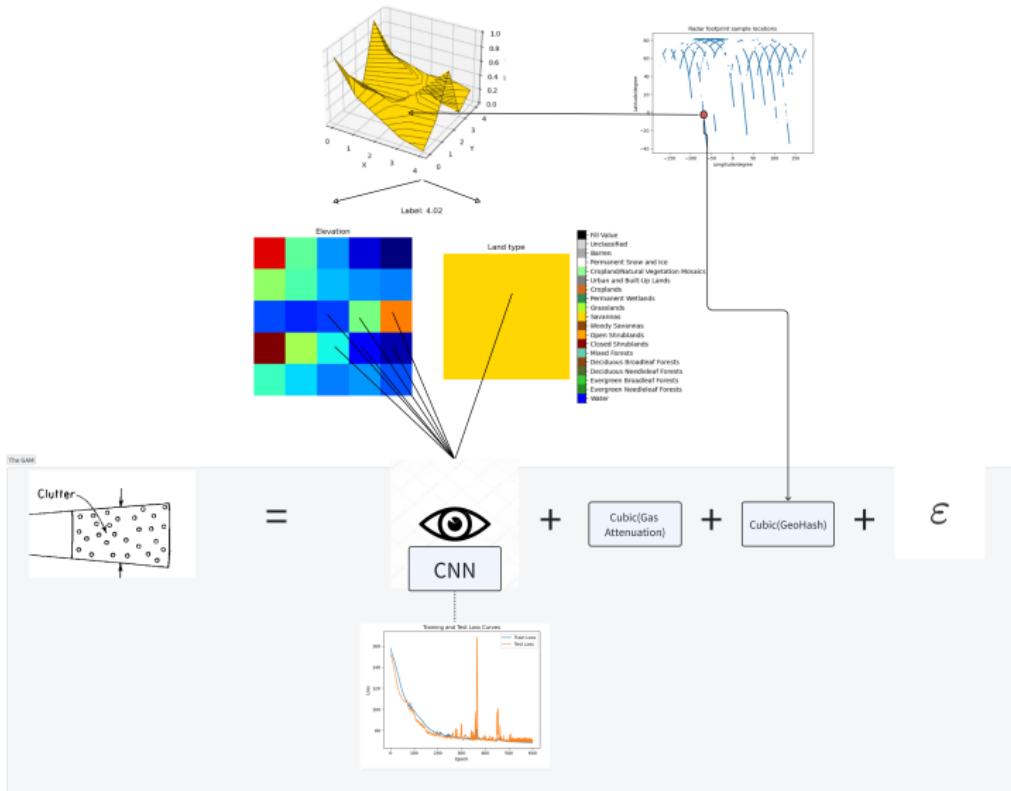
Background and Methodology



Background and Methodology



Background and Methodology

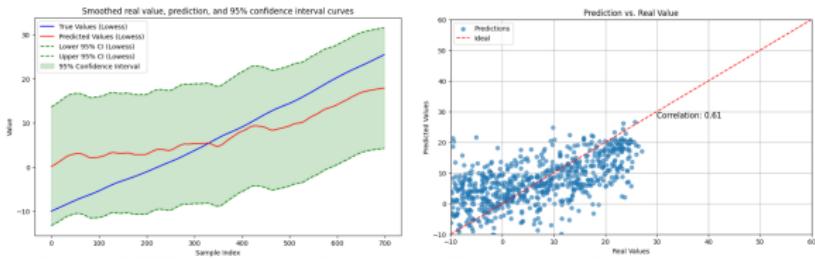


Results and Discussion

Ablation experiment	Model Pseudo goodness-of-fit	Prediction-true value correlation
Complete model	57%	0.61
Without CNN	12%	0.30
CNN alone	44%	0.47
Others	->44%	-

Tab. Experiment results

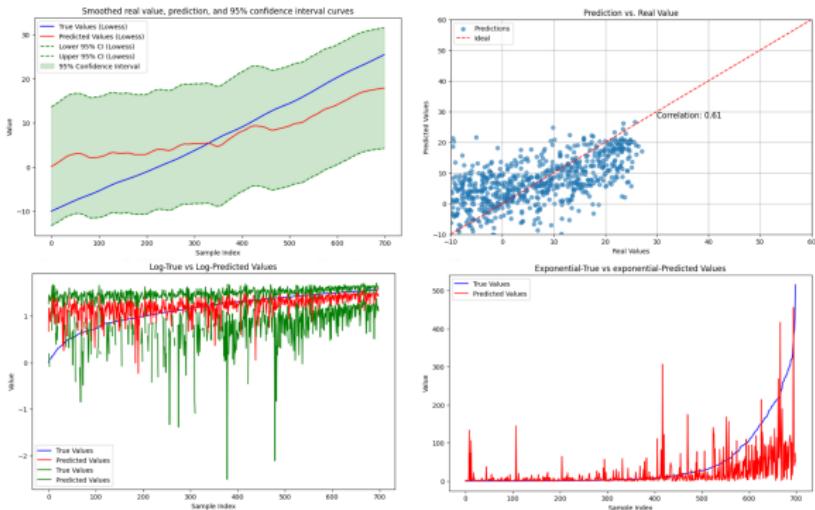
Results and Discussion



Ablation experiment	Model Pseudo goodness-of-fit	Prediction-true value correlation
Complete model	57%	0.61
Without CNN	12%	0.30
CNN alone	44%	0.47
Others	->44%	-

Tab. Experiment results

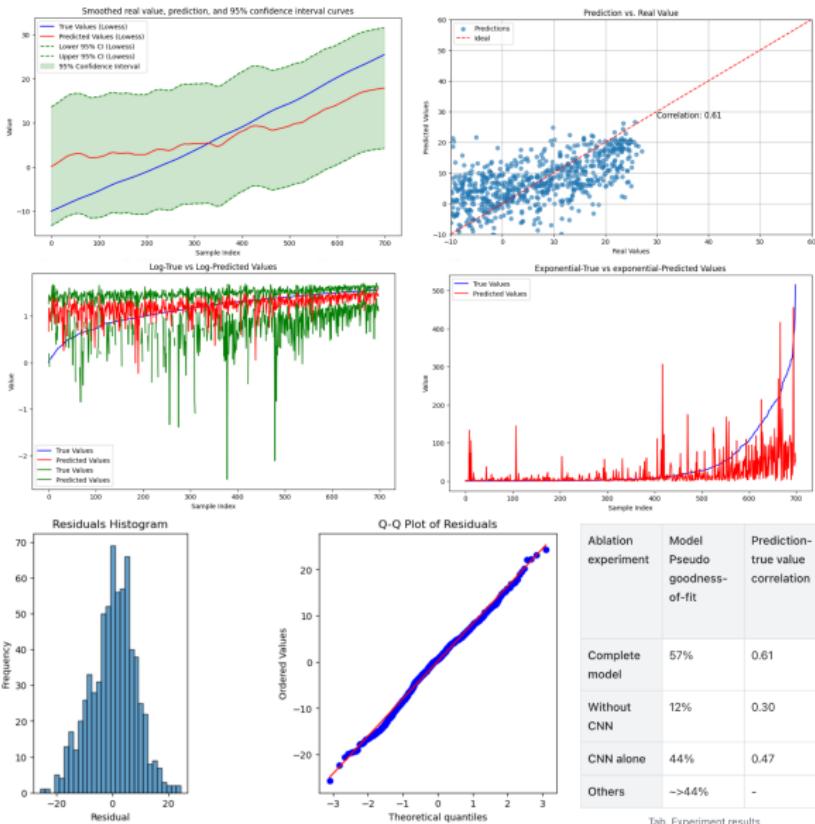
Results and Discussion



Ablation experiment	Model Pseudo goodness-of-fit	Prediction-true value correlation
Complete model	57%	0.61
Without CNN	12%	0.30
CNN alone	44%	0.47
Others	->44%	-

Tab. Experiment results

Results and Discussion



Tab. Experiment results