

# Final Script

*Rachel Zhang (yz2334)*

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## Data Importing and Cross-Validation

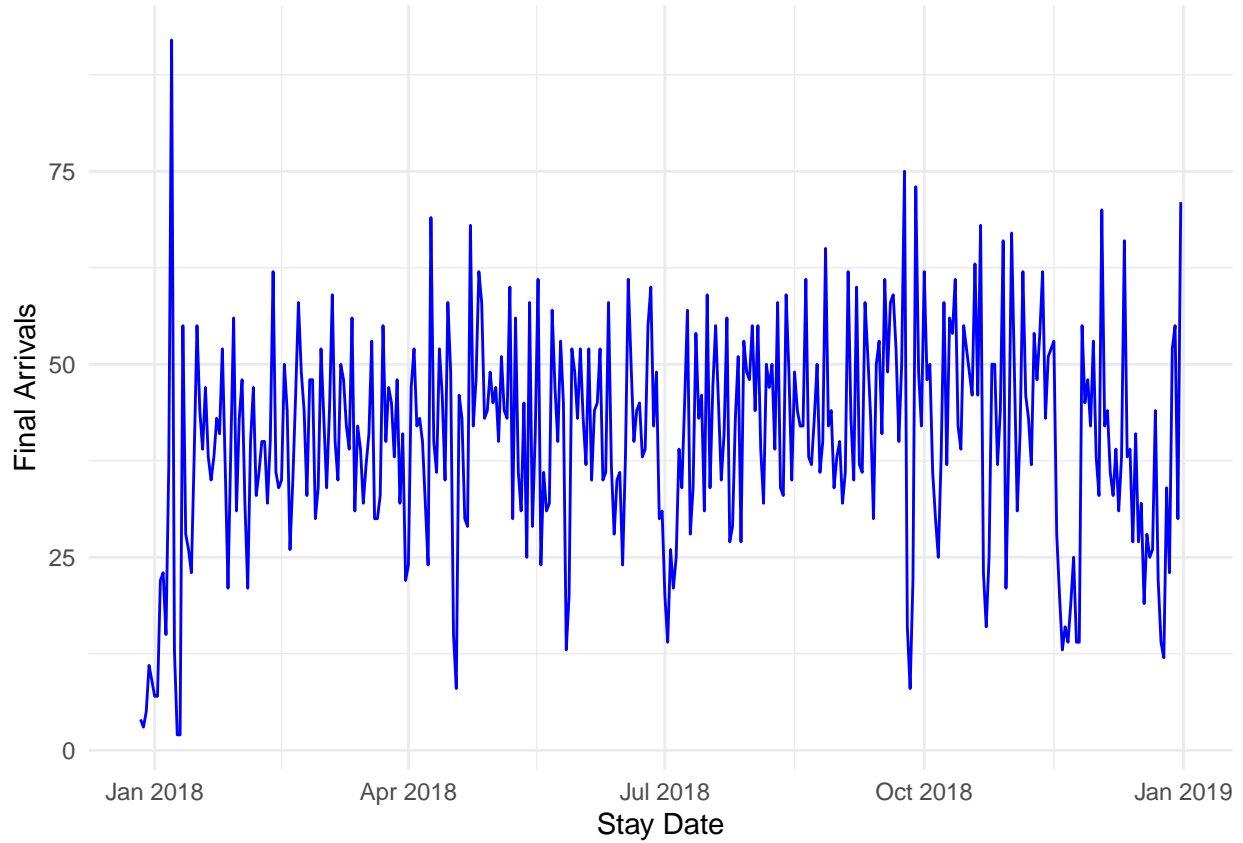


Table 1: Training Set Overview

	ROH0	DOW	ROH1	ROH2	ROH3	ROH4	ROH5	ROH6	ROH7	ROH14	ROH21	ROH30	ROH60	ROH90
2018-11-15	52	Thursday	49	46	42	41	41	41	38	29	25	22	7	1
2018-06-11	58	Monday	58	56	53	51	47	47	47	40	37	30	9	4
2018-05-04	51	Friday	48	47	46	44	41	38	38	30	28	21	4	1
2018-10-21	68	Sunday	67	67	66	66	64	59	54	44	20	18	10	5
2018-09-22	40	Saturday	38	36	36	35	33	32	31	27	20	8	5	5
2018-07-01	20	Sunday	17	16	16	14	13	13	13	10	10	6	2	2
2018-10-29	66	Monday	61	56	55	53	51	49	43	32	26	25	7	2
2018-03-21	30	Wednesday	28	25	21	21	21	20	20	9	5	5	3	0
2018-09-29	49	Saturday	45	45	42	39	37	36	36	31	26	23	17	12
2018-11-21	14	Wednesday	14	13	12	12	12	12	11	10	10	9	6	2

Table 2: Mean Errors

	apk	mpk	reg	ME	knn	wknn	dtree	rf	svm
13	1.3	-1.2	1.06	-14.4	1.85	1.28	0.644	0.716	0.729

## Modeling

Additive Pick-up

Multiplicative Pick-up

Regression

Neural Network

K-Nearest Neighbor

Tree

Support Vector Machine

## Results

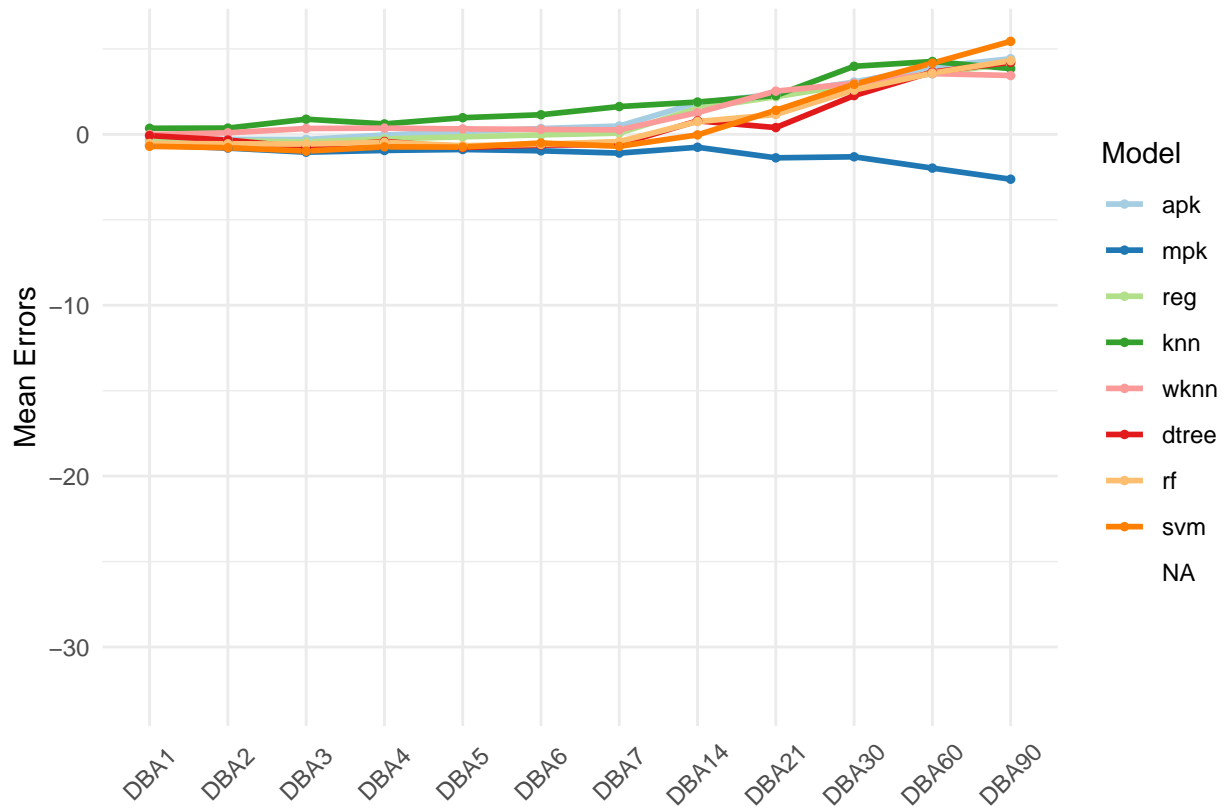


Table 3: Mean Absolute Errors

	apk	mpk	reg	MAE	knn	wknn	dtree	rf	svm
	13	5.37	7.15	5.26	15	6.38	6.27	5.61	5.42

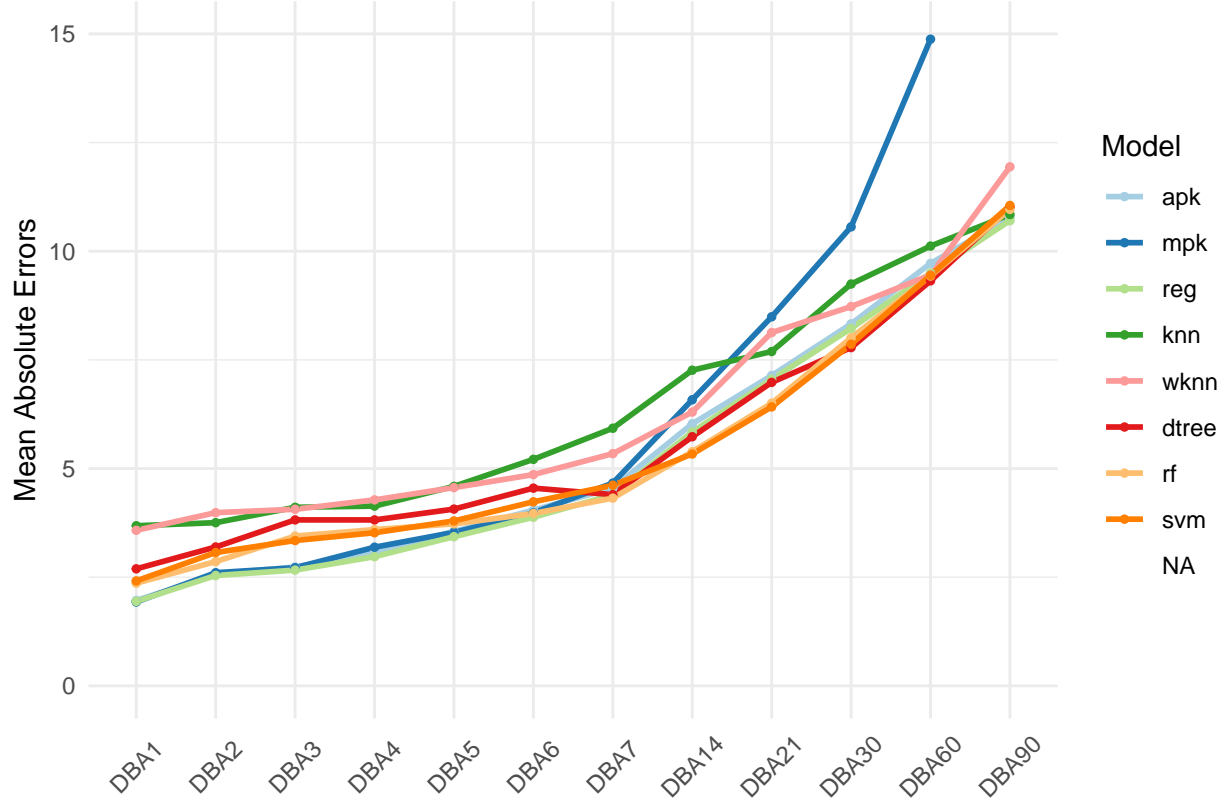


Table 4: Standard Deviation Errors

	apk	mpk	reg	SD	knn	wknn	dtree	rf	svm
13	6.67	9.14	6.55	9.09	7.83	7.77	6.94	6.7	6.87

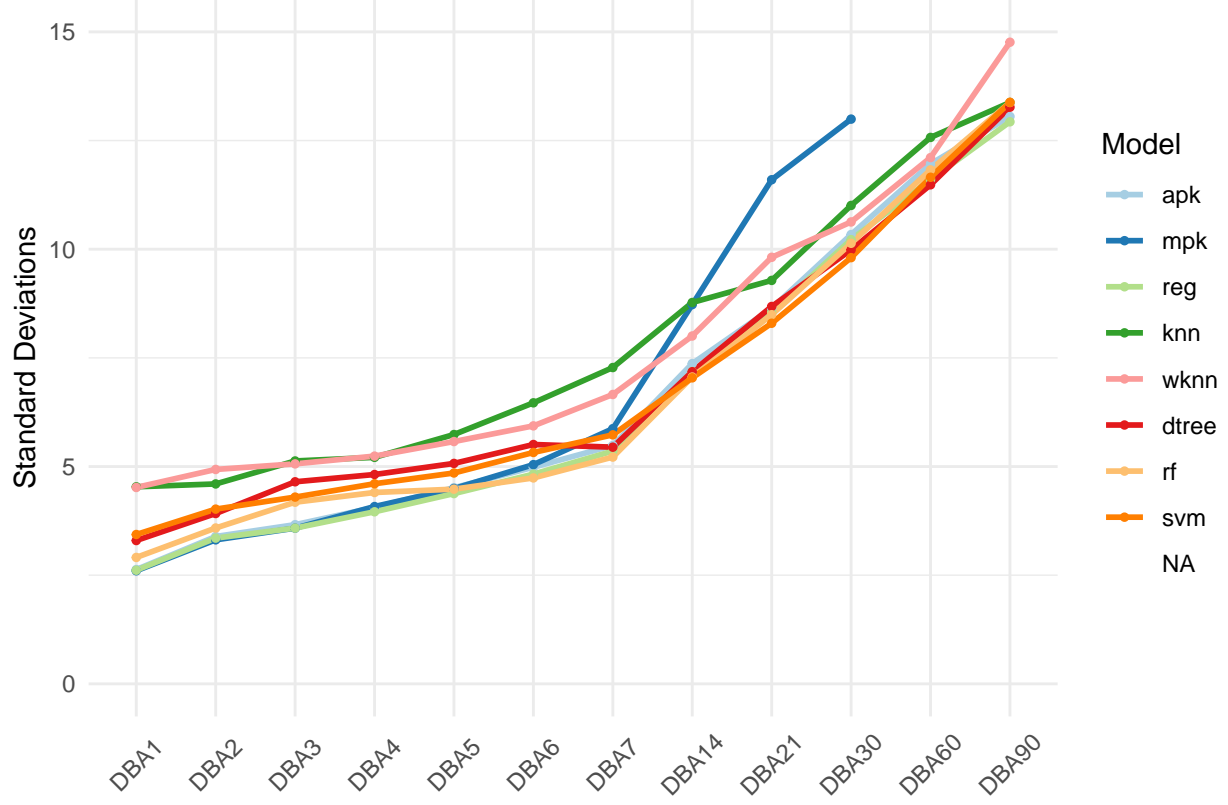


Table 5: Mean Percentage Errors

	apk	mpk	reg	MPE	knn	wknn	dtree	rf	svm
13	0.164	-0.039	0.144	-0.405	0.202	0.173	0.1	0.098	0.122

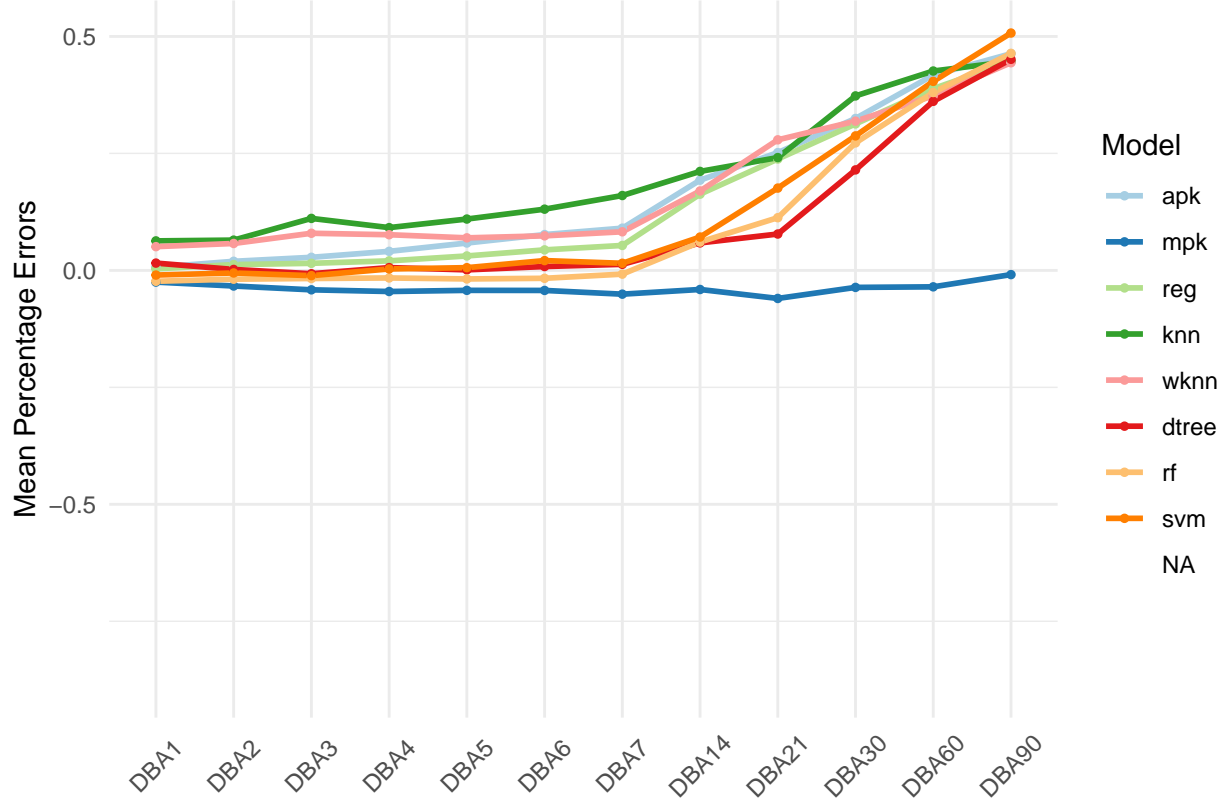


Table 6: MAPE

	apk	mpk	reg	MAPE	knn	wknn	dtree	rf	svm
13	0.251	0.232	0.238	0.44	0.301	0.286	0.228	0.228	0.234

