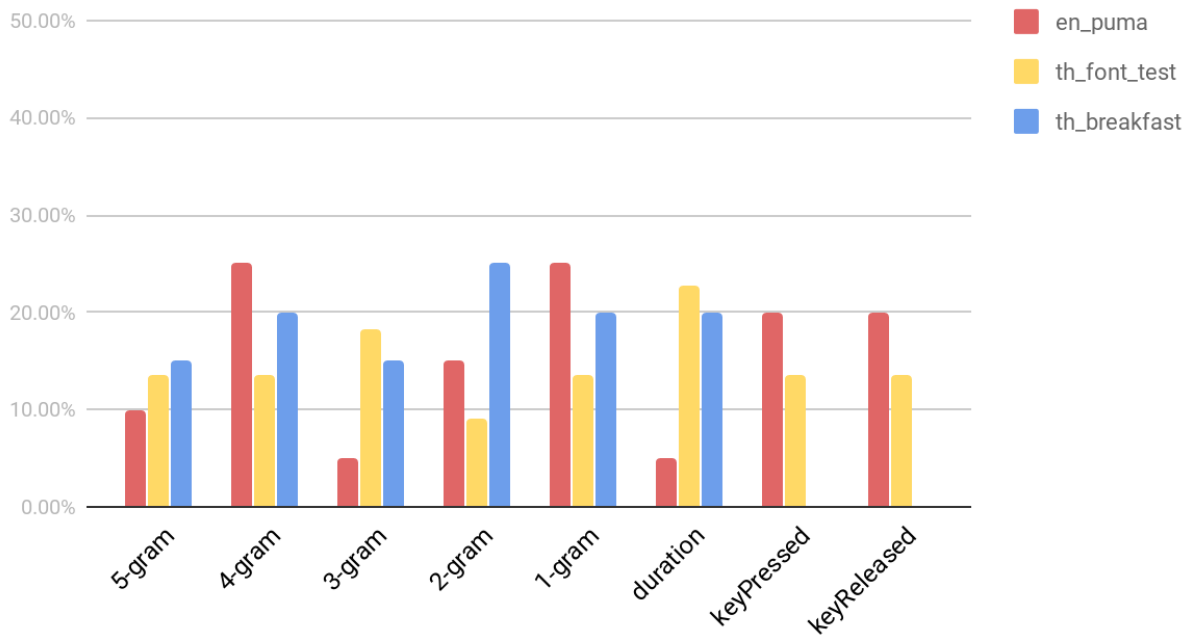


## typo\_data\_sets

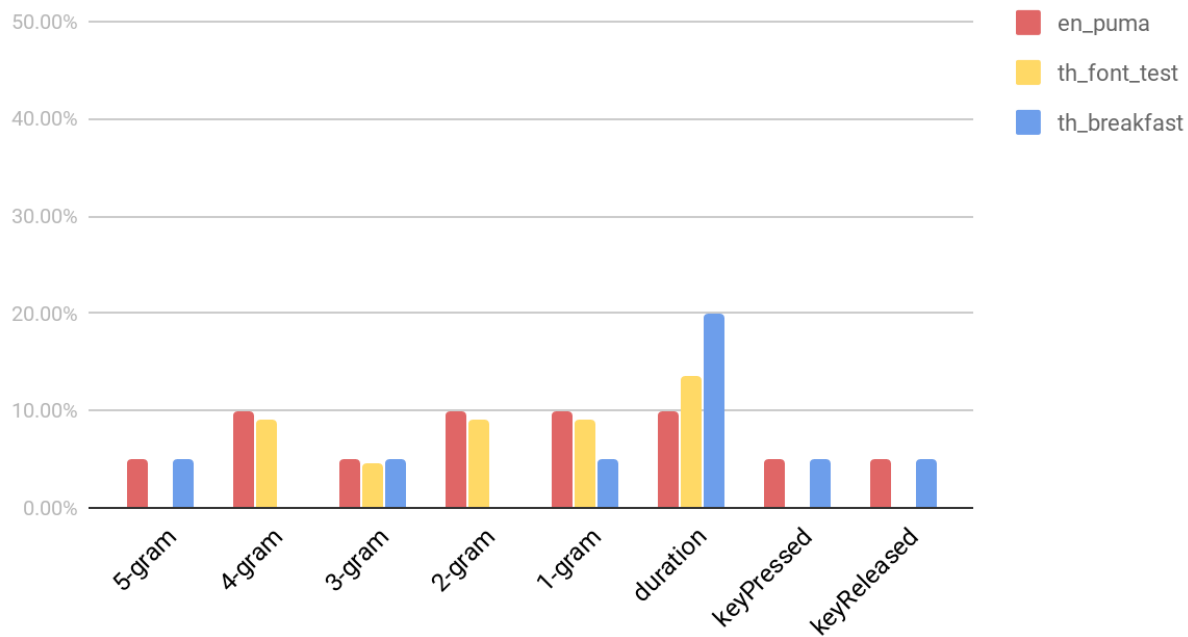
en_puma	training_set	100	test_set	20
th_font_test	training_set	98	test_set	22
th_breakfast	training_set	90	test_set	20



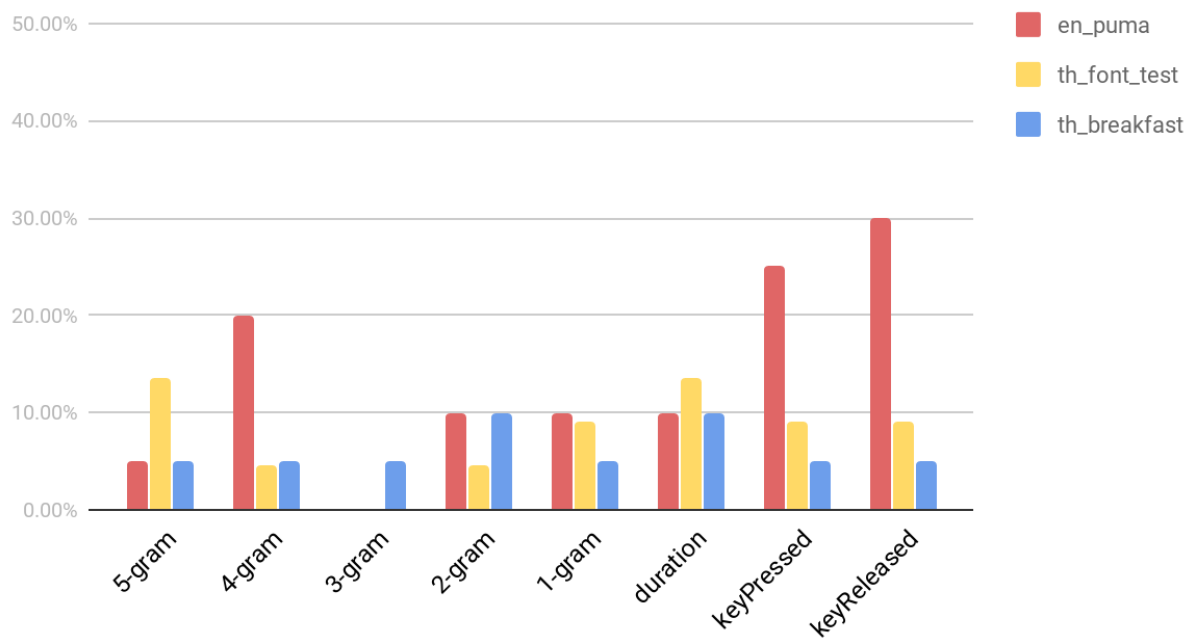
## dtw-raw



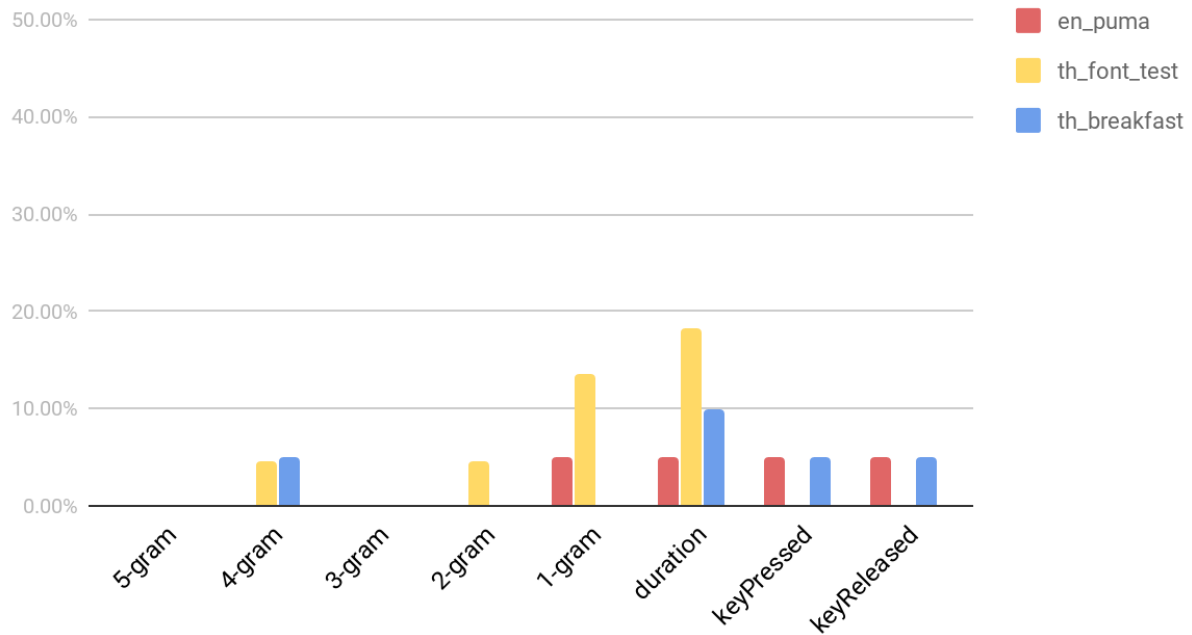
## dtw-mapping



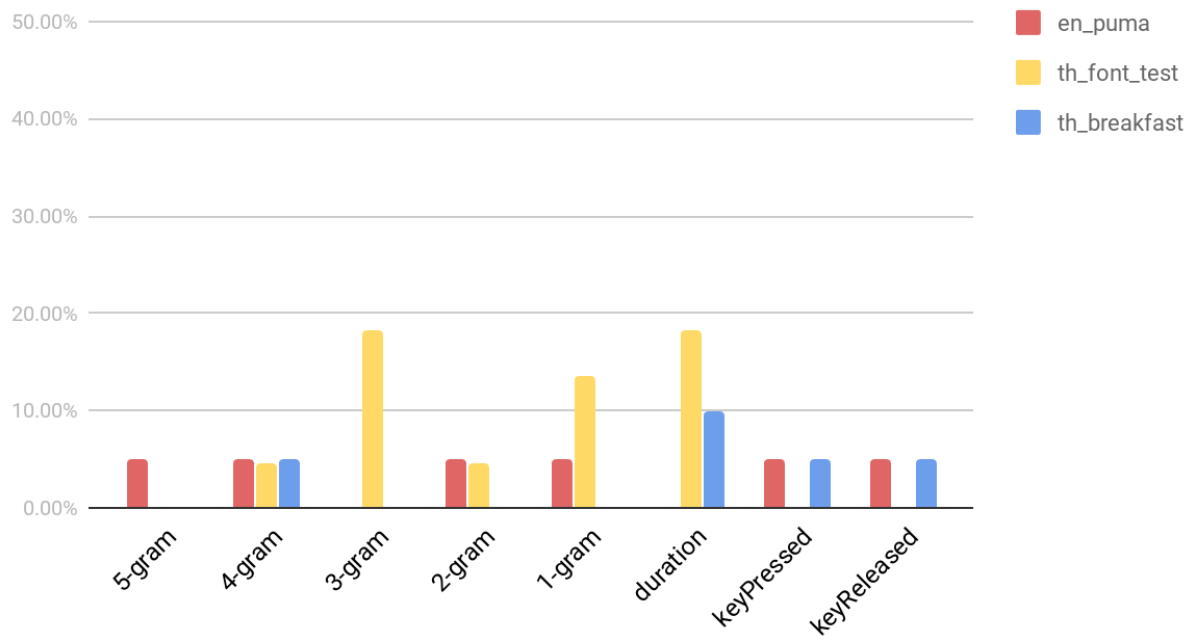
## dtw-fourier



## dtw-fourier-mapping

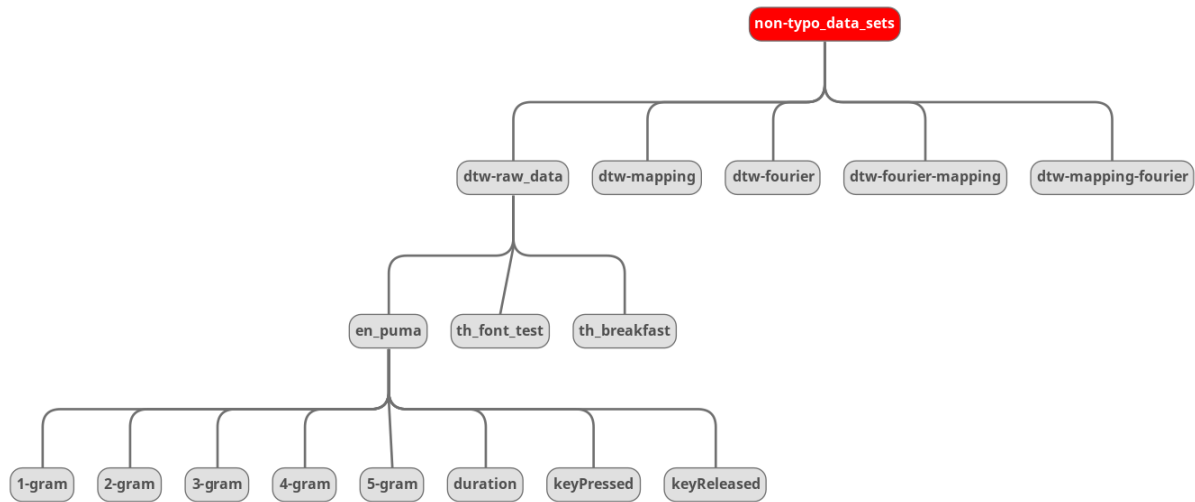


## dtw-mapping-fourier

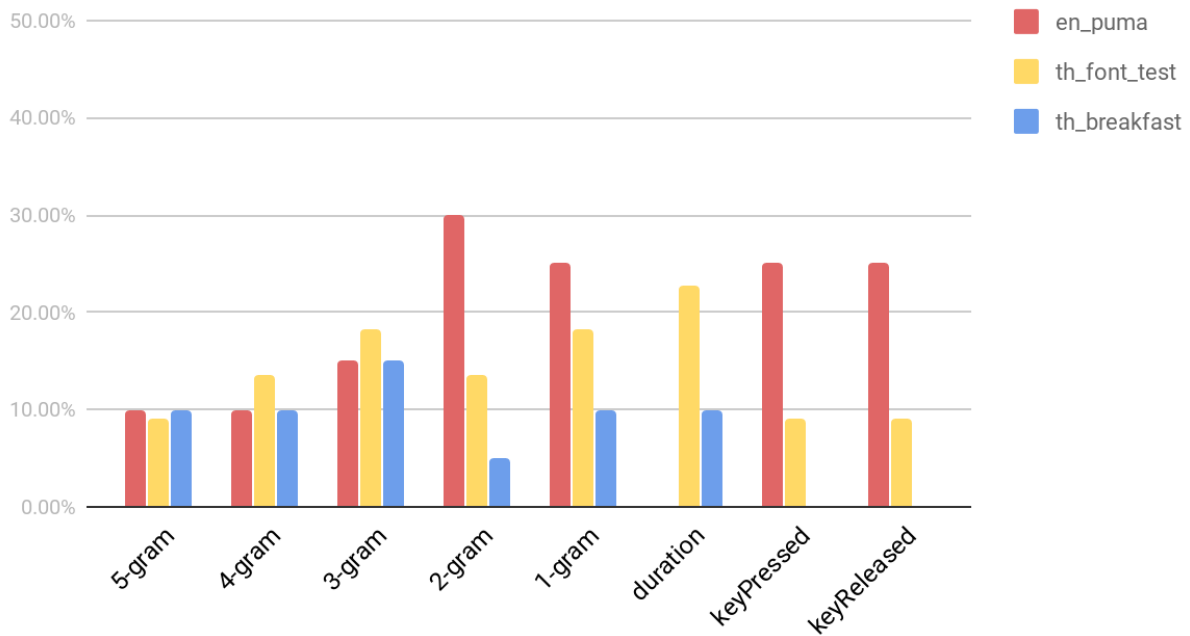


## non-typo\_data\_sets

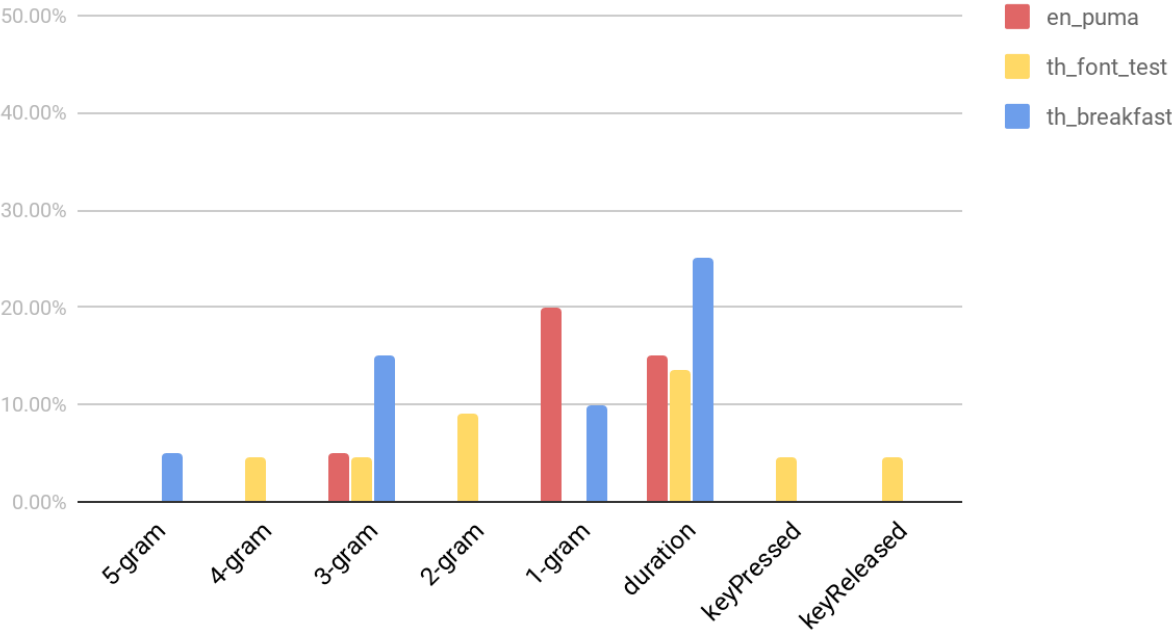
en_puma	training_set	100	test_set	20
th_font_test	training_set	98	test_set	22
th_breakfast	training_set	90	test_set	20



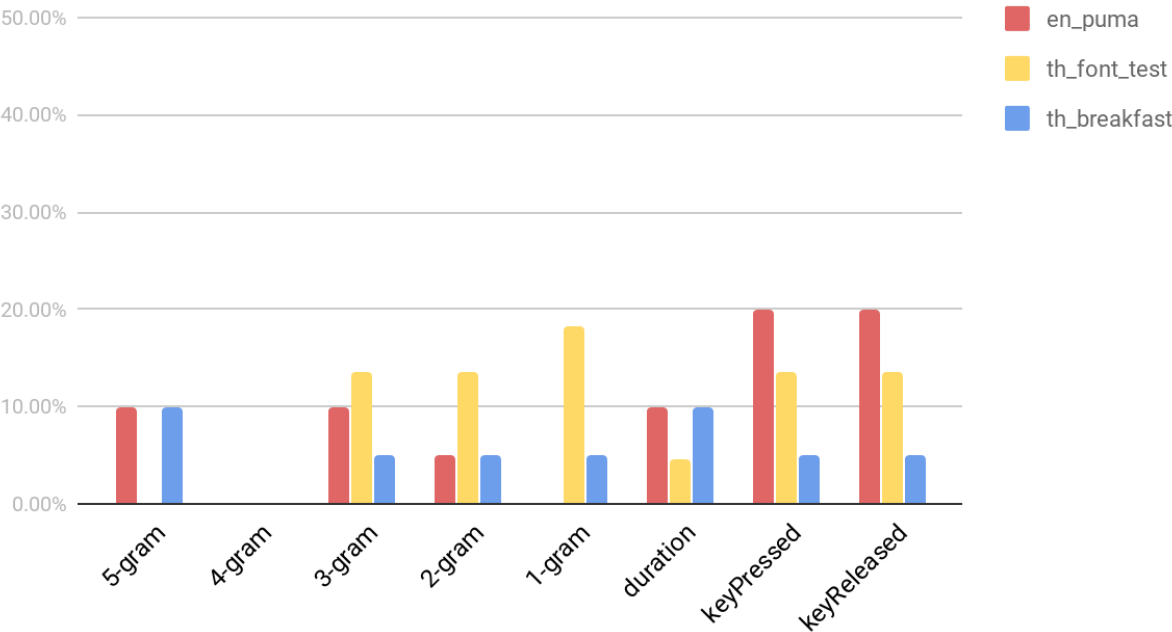
## dtw-raw



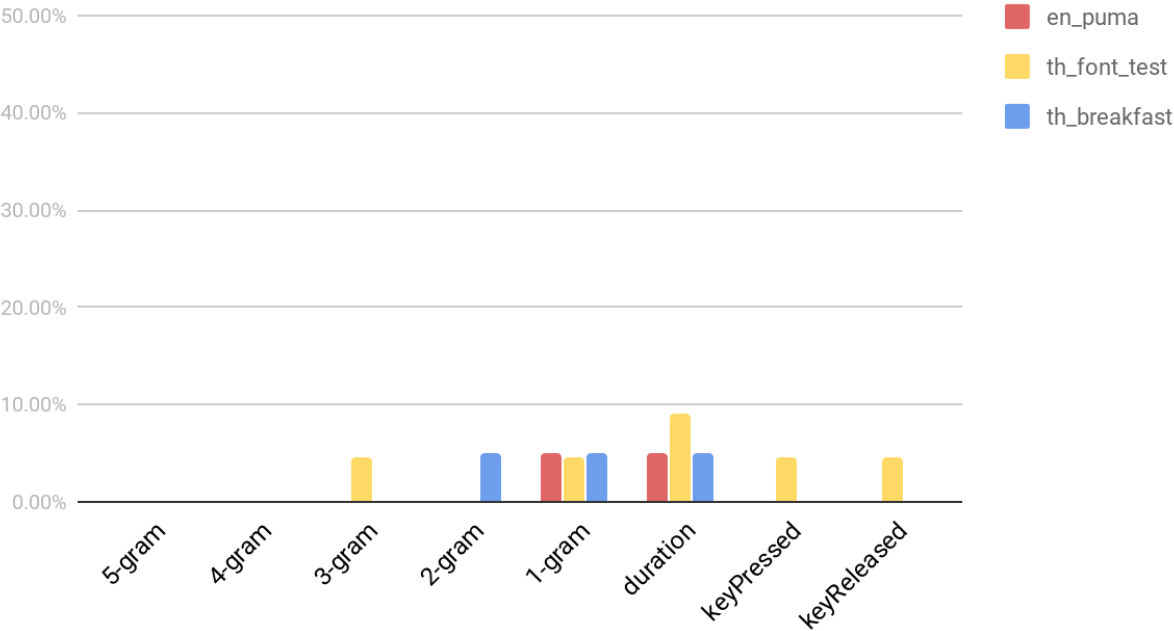
dtw-mapping



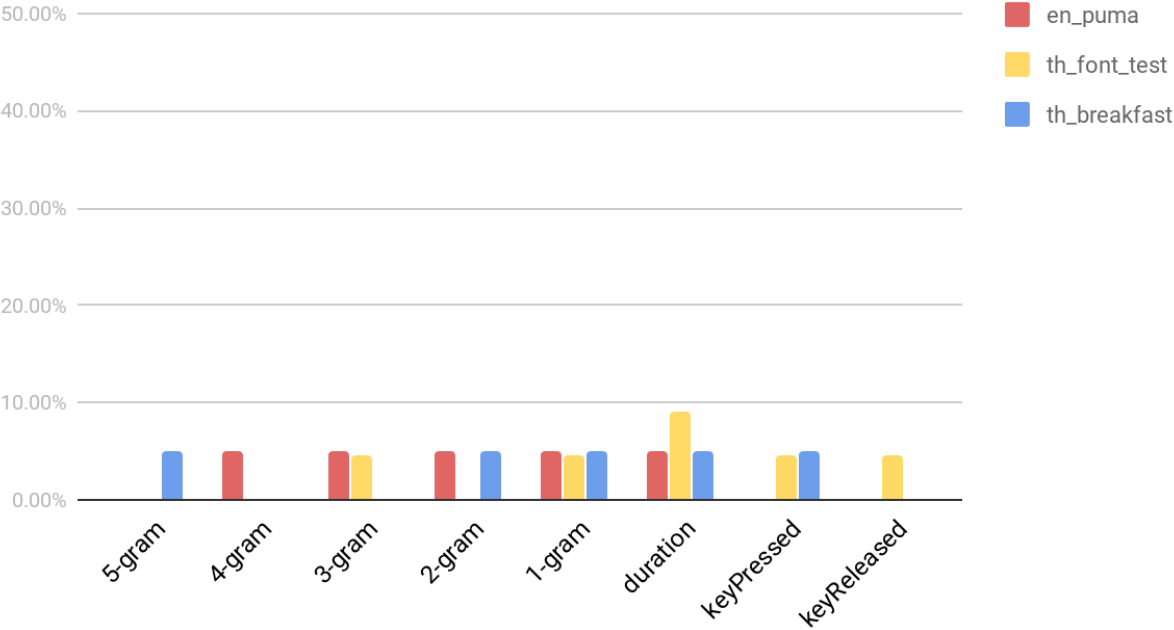
dtw-fourier



dtw-fourier-mapping

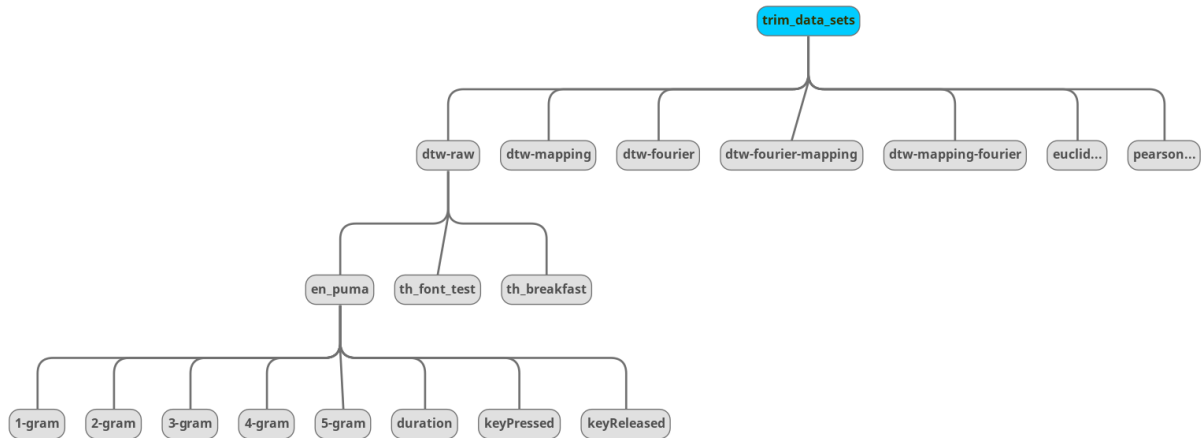


dtw-mapping-fourier

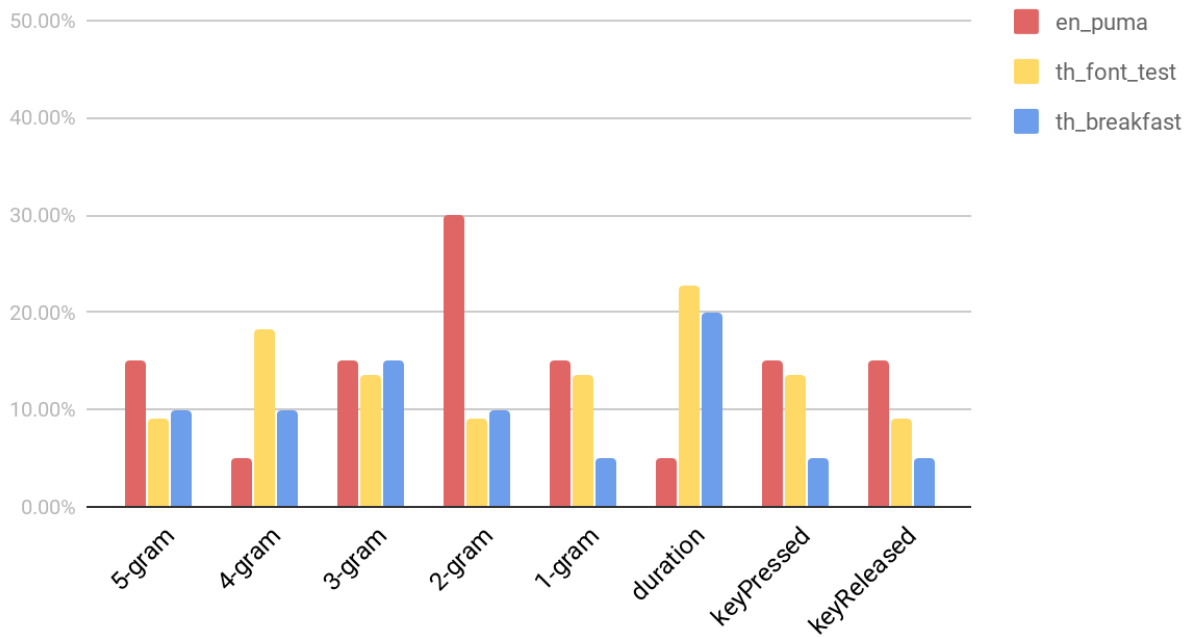


## trim\_data\_sets

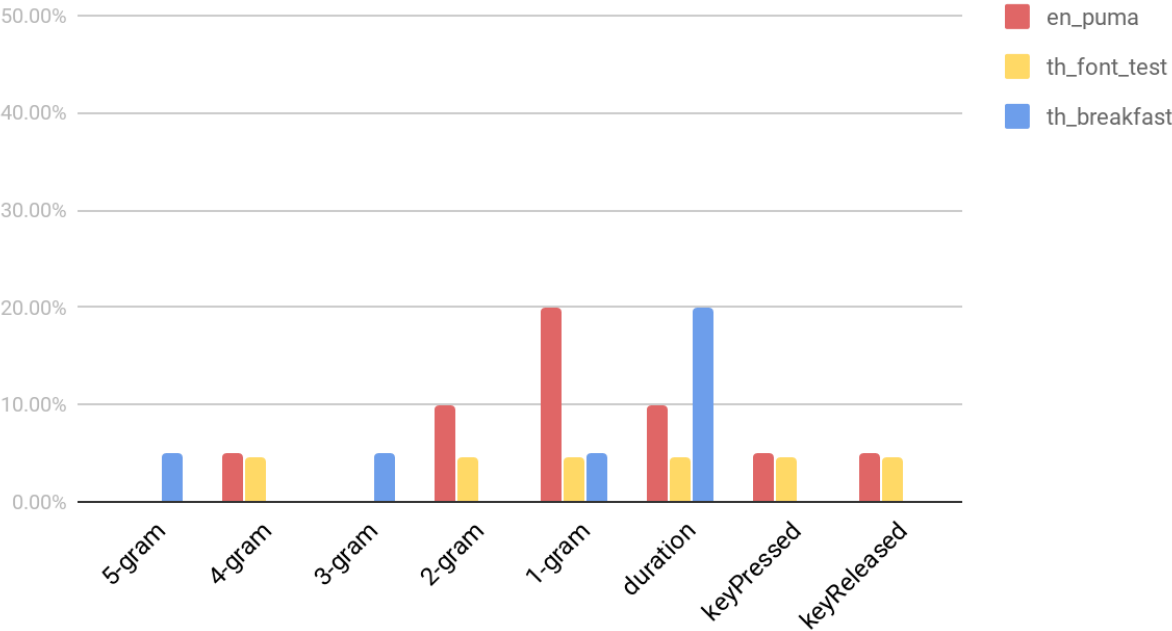
en_puma	training_set	100	test_set	20
th_font_test	training_set	98	test_set	22
th_breakfast	training_set	90	test_set	20



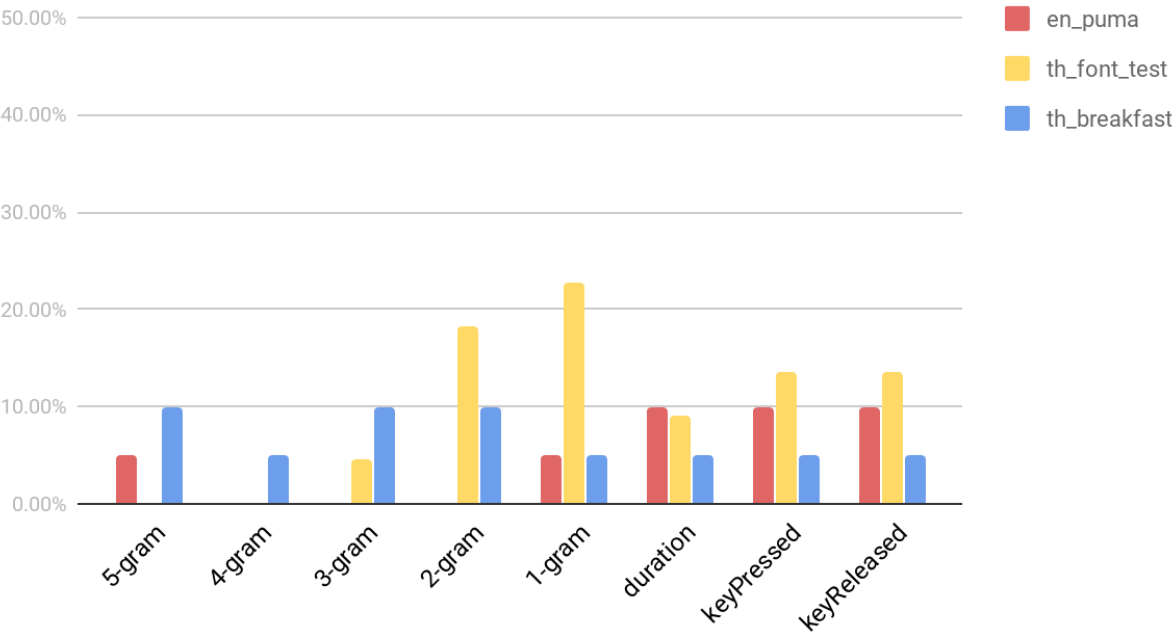
## dtw-raw



dtw-mapping

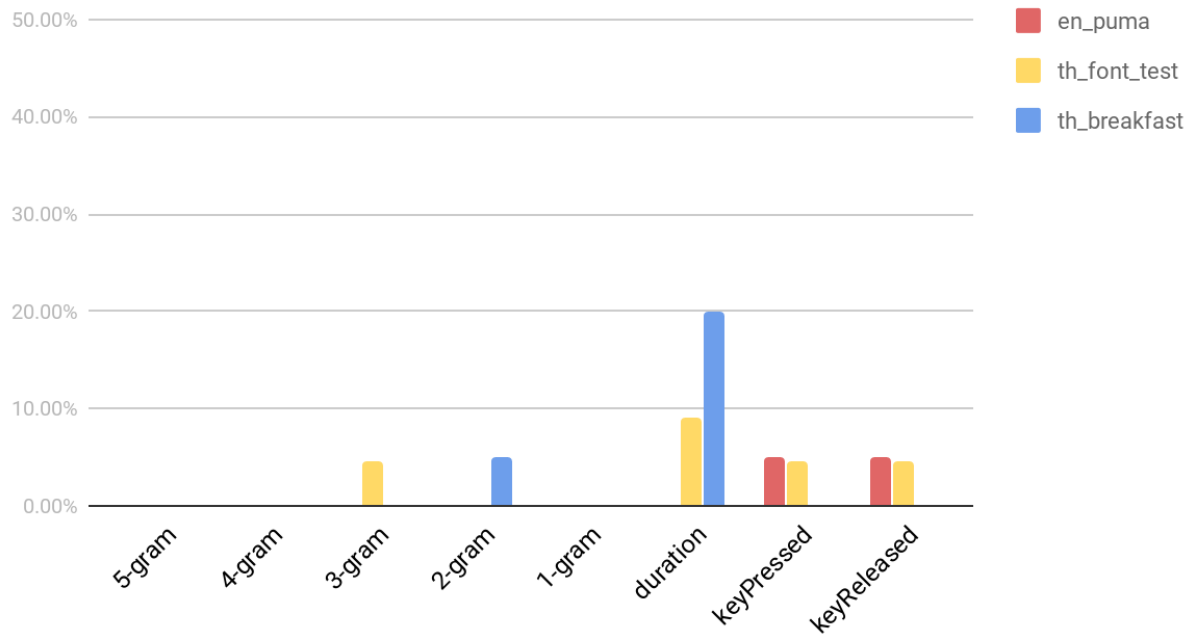


dtw-fourier

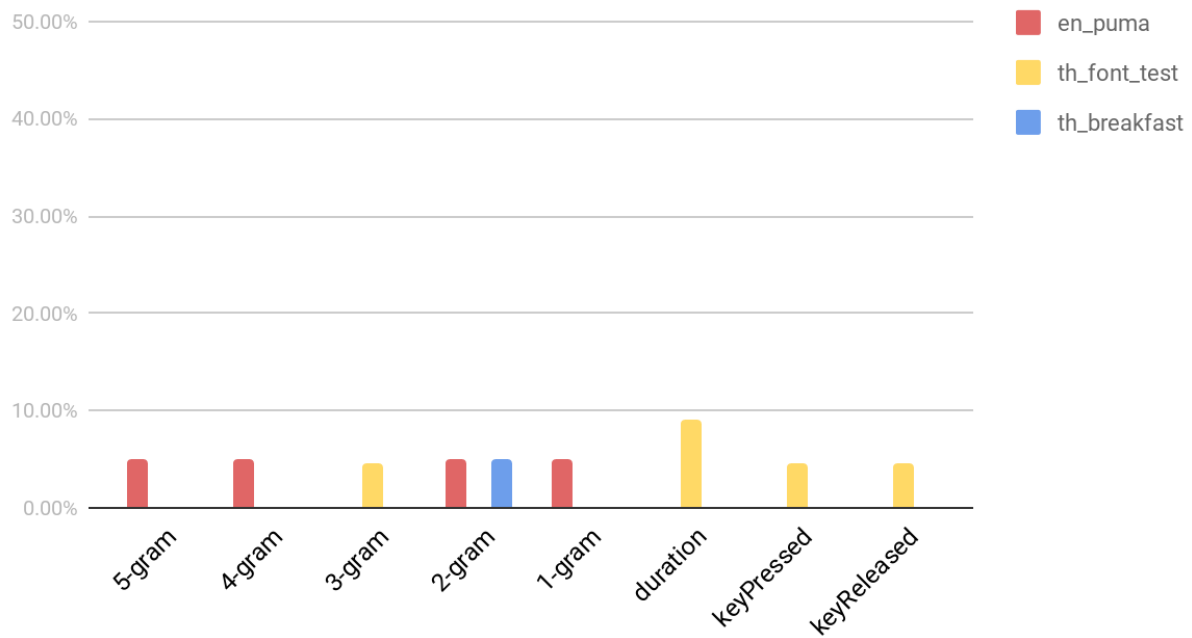




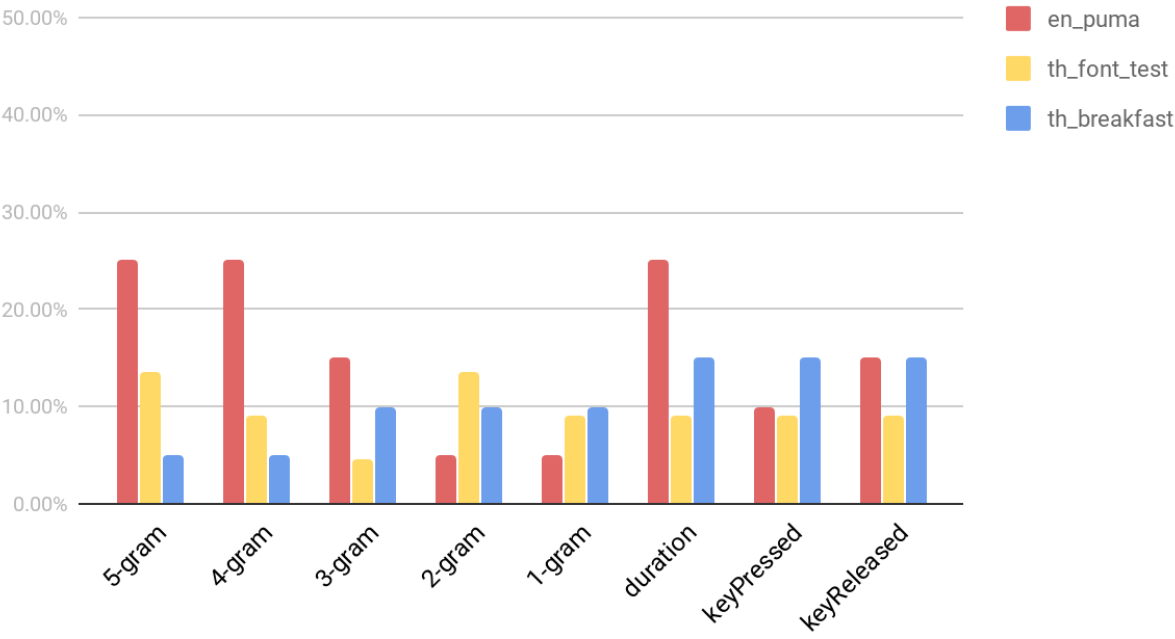
## dtw-fourier-mapping



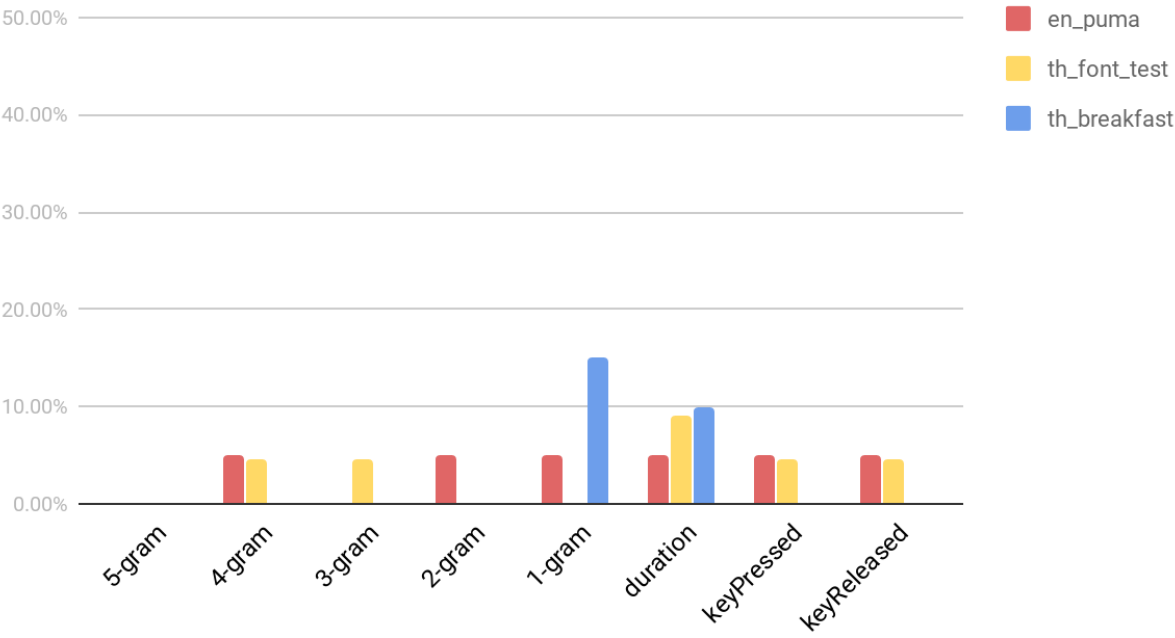
## dtw-mapping-fourier



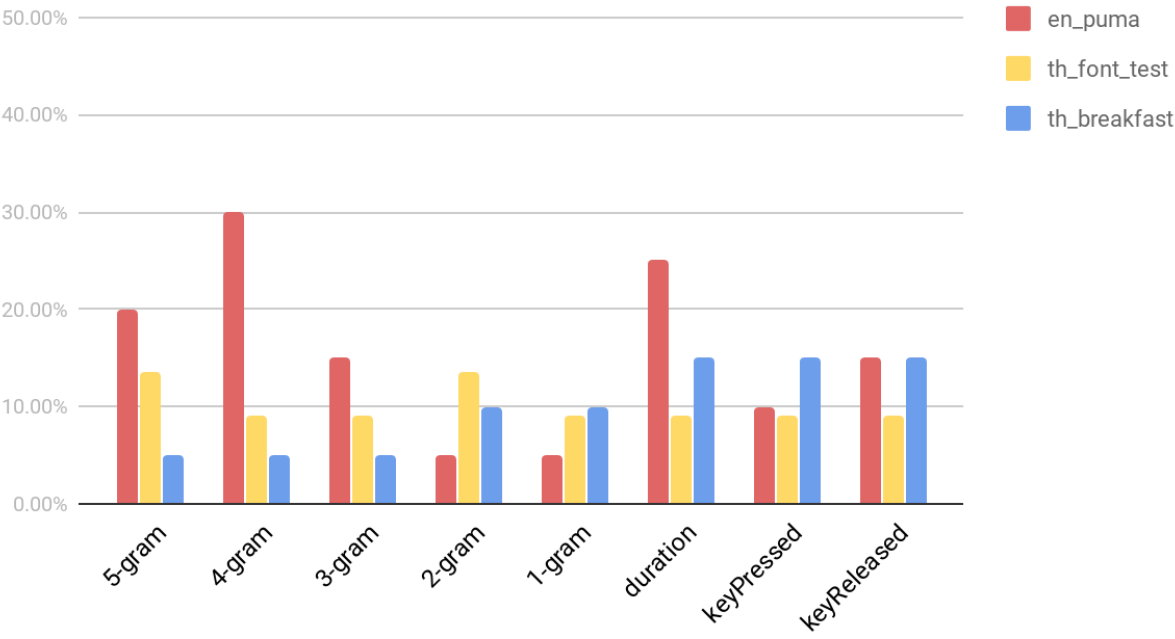
euclid-raw



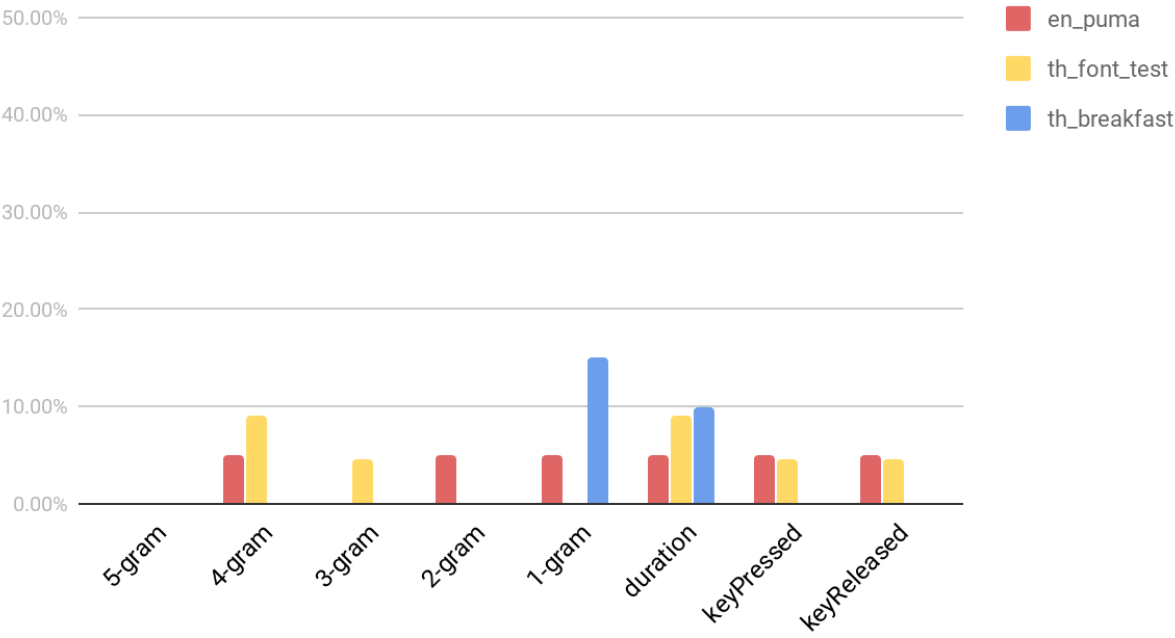
euclid-mapping



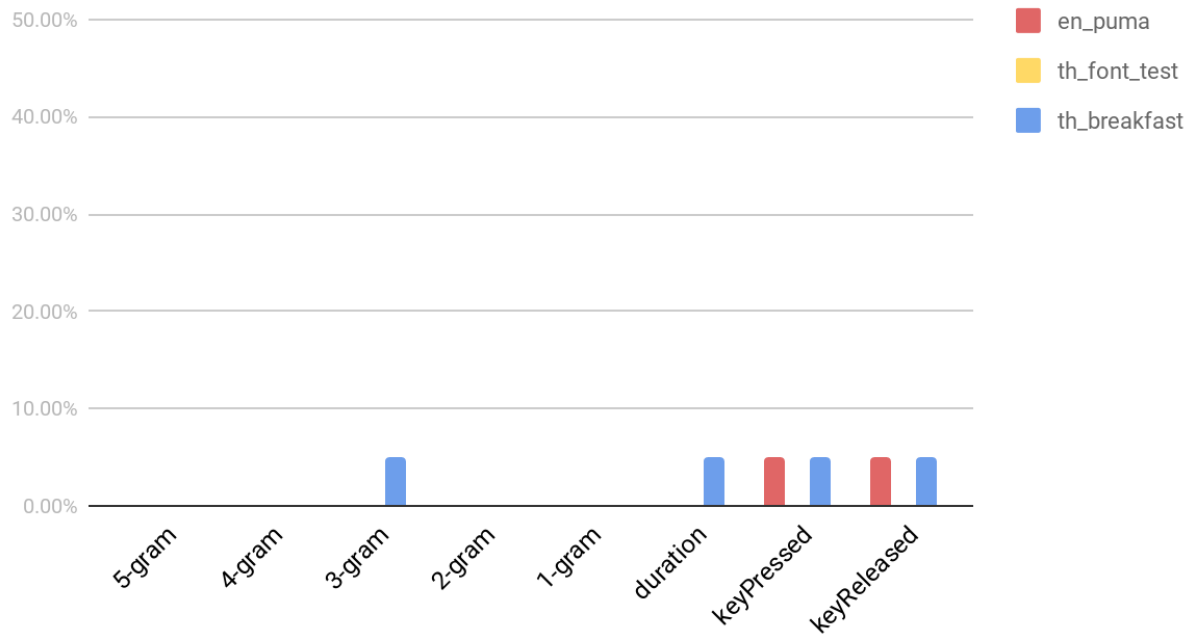
euclid-fourier



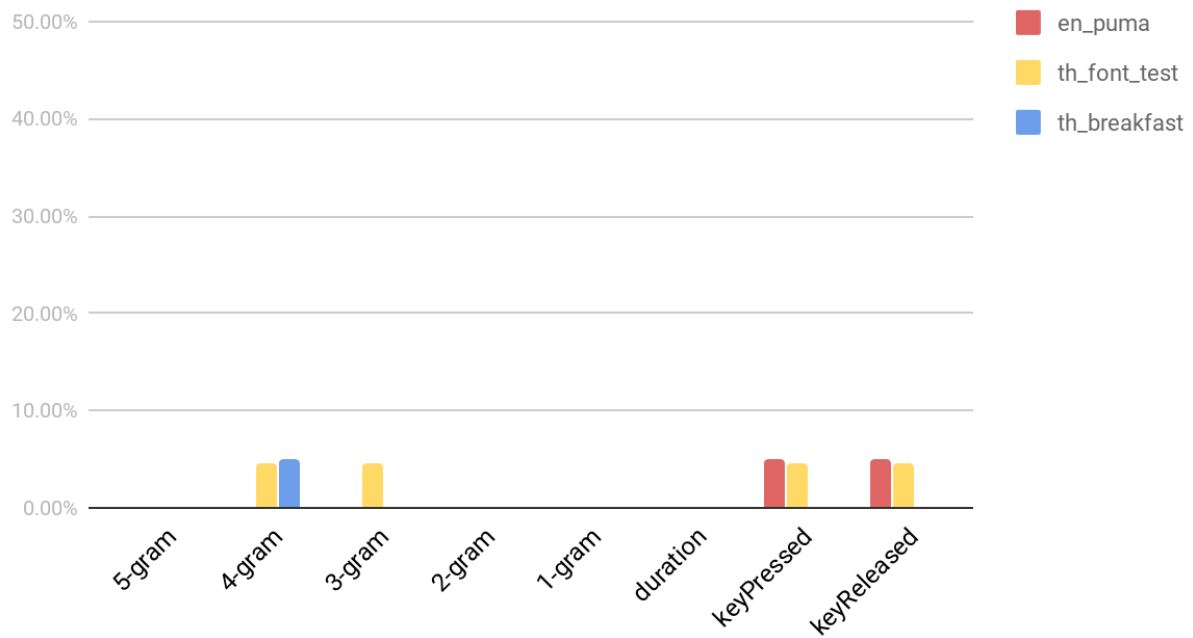
euclid-fourier-mapping



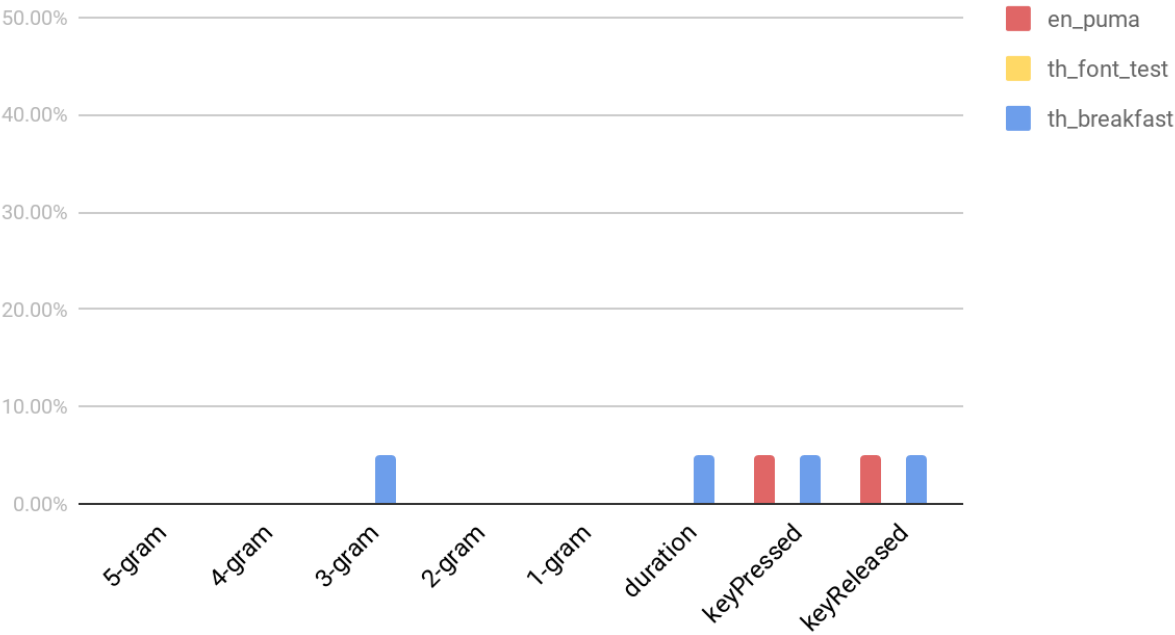
## pearson-raw



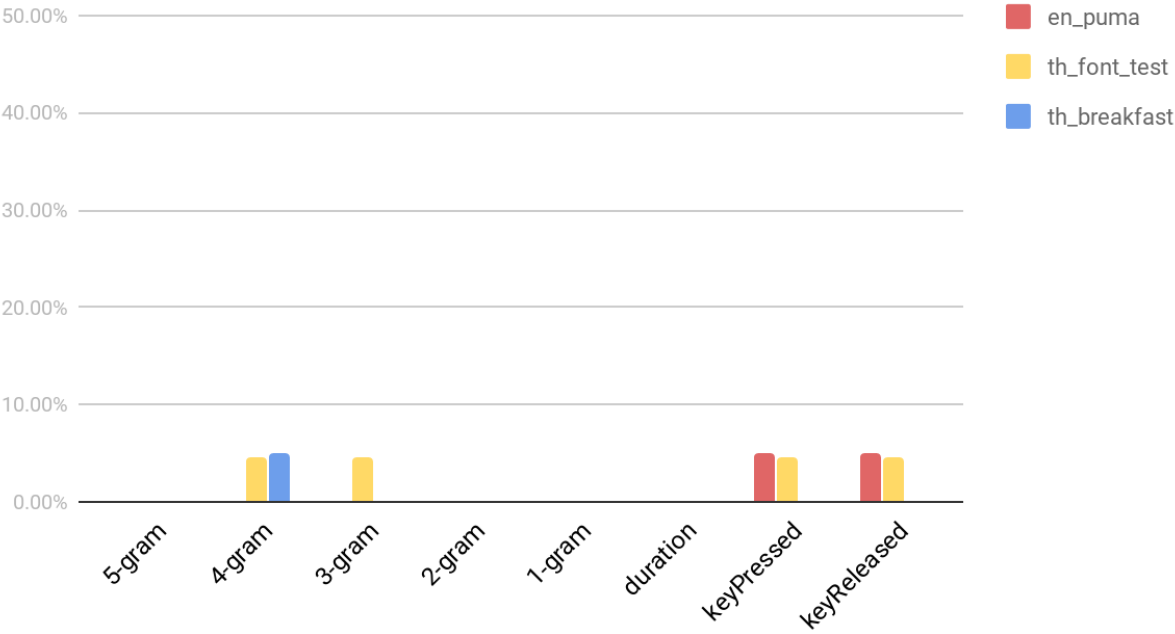
## pearson-mapping



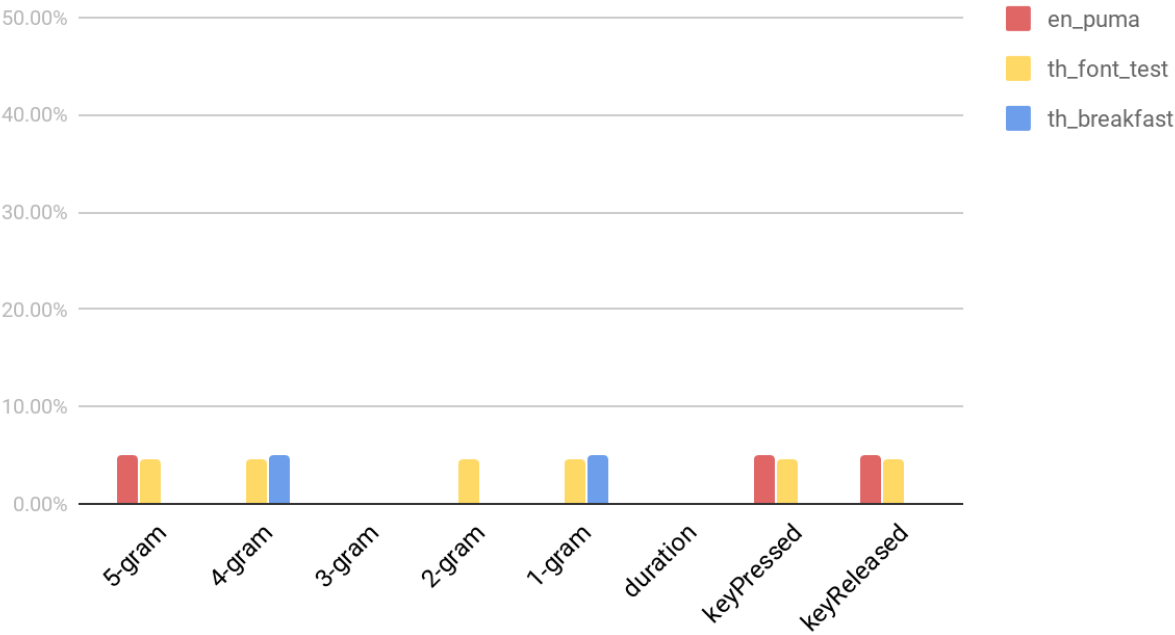
pearson-fourier



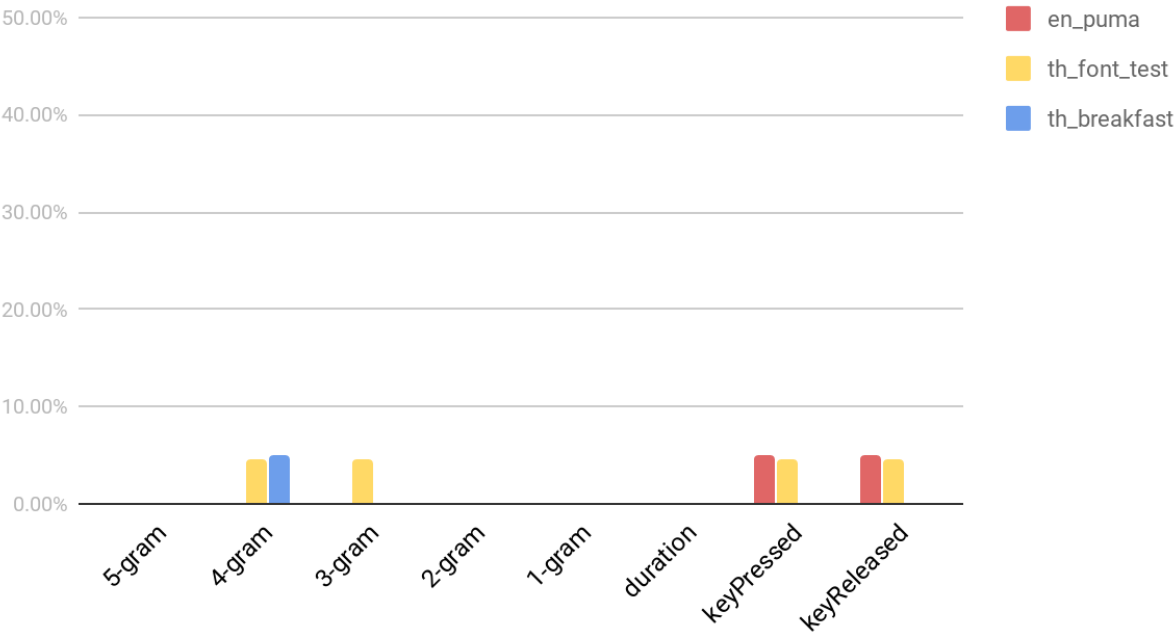
pearson-fourier-mapping



pearson-mapping-fourier



euclid-mapping-fourier



ตารางผลการทดลอง

typo_data_sets	average
<b>dtw-raw</b>	<b>14.92%</b>
dtw-mapping	6.27%
dtw-fourier	9.32%
dtw-fourier_mapping	3.58%
dtw-mapping_fourier	4.75%
non-typo_data_sets	average
<b>dtw-raw</b>	<b>13.07%</b>
dtw-mapping	5.66%
dtw-fourier	8.22%
dtw-fourier_mapping	2.18%
dtw-mapping_fourier	3.22%
trim_data_sets	average
<b>dtw-raw</b>	<b>12.67%</b>
dtw-mapping	4.89%
dtw-fourier	7.37%
dtw-fourier_mapping	2.41%
dtw-mapping_fourier	1.99%
<b>euclid-raw</b>	<b>11.97%</b>
euclid-mapping	3.43%
<b>euclid-fourier</b>	<b>11.95%</b>
euclid-fourier_mapping	3.62%
euclid-mapping_fourier	1.38%
pearson-raw	1.25%
pearson-mapping	1.38%
pearson-fourier	1.25%
pearson-fourier_mapping	1.38%
pearson-mapping_fourier	2.18%

## สรุปผลการทดลอง

### typo\_data\_sets

dtw-row

	en_puma	th_font_test	th_breakfast	average
5-gram	10.00%	13.64%	15.00%	12.88%
<b>4-gram</b>	<b>25.00%</b>	<b>13.64%</b>	<b>20.00%</b>	<b>19.55%</b>
3-gram	5.00%	18.18%	15.00%	12.73%
2-gram	15.00%	9.09%	25.00%	16.36%
<b>1-gram</b>	<b>25.00%</b>	<b>13.64%</b>	<b>20.00%</b>	<b>19.55%</b>
duration	5.00%	22.73%	20.00%	15.91%
keyPressed	20.00%	13.64%	0.00%	11.21%
keyReleased	20.00%	13.64%	0.00%	11.21%

### non-typo\_data\_sets

dtw-row

	en_puma	th_font_test	th_breakfast	average
5-gram	10.00%	9.09%	10.00%	9.70%
4-gram	10.00%	13.64%	10.00%	11.21%
<b>3-gram</b>	<b>15.00%</b>	<b>18.18%</b>	<b>15.00%</b>	<b>16.06%</b>
<b>2-gram</b>	<b>30.00%</b>	<b>13.64%</b>	<b>5.00%</b>	<b>16.21%</b>
<b>1-gram</b>	<b>25.00%</b>	<b>18.18%</b>	<b>10.00%</b>	<b>17.73%</b>
duration	0.00%	22.73%	10.00%	10.91%
keyPressed	25.00%	9.09%	0.00%	11.36%
keyReleased	25.00%	9.09%	0.00%	11.36%



## trim\_data\_sets

### dtw-row

	en_puma	th_font_test	th_breakfast	average
5-gram	15.00%	9.09%	10.00%	11.36%
4-gram	5.00%	18.18%	10.00%	11.06%
<b>3-gram</b>	<b>15.00%</b>	<b>13.64%</b>	<b>15.00%</b>	<b>14.55%</b>
<b>2-gram</b>	<b>30.00%</b>	<b>9.09%</b>	<b>10.00%</b>	<b>16.36%</b>
1-gram	15.00%	13.64%	5.00%	11.21%
<b>duration</b>	<b>5.00%</b>	<b>22.73%</b>	<b>20.00%</b>	<b>15.91%</b>
keyPressed	15.00%	13.64%	5.00%	11.21%
keyReleased	15.00%	9.09%	5.00%	9.70%

### euclid-row

	en_puma	th_font_test	th_breakfast	average
5-gram	25.00%	13.64%	5.00%	14.55%
4-gram	25.00%	9.09%	5.00%	13.03%
3-gram	15.00%	4.55%	10.00%	9.85%
2-gram	5.00%	13.64%	10.00%	9.55%
1-gram	5.00%	9.09%	10.00%	8.03%
<b>duration</b>	<b>25.00%</b>	<b>9.09%</b>	<b>15.00%</b>	<b>16.36%</b>
keyPressed	10.00%	9.09%	15.00%	11.36%
keyReleased	15.00%	9.09%	15.00%	13.03%

### euclid-fourier

	en_puma	th_font_test	th_breakfast	average
5-gram	20.00%	13.64%	5.00%	12.88%
4-gram	30.00%	9.09%	5.00%	14.70%
3-gram	15.00%	9.09%	5.00%	9.70%
2-gram	5.00%	13.64%	10.00%	9.55%
1-gram	5.00%	9.09%	10.00%	8.03%
<b>duration</b>	<b>25.00%</b>	<b>9.09%</b>	<b>15.00%</b>	<b>16.36%</b>
keyPressed	10.00%	9.09%	15.00%	11.36%
keyReleased	15.00%	9.09%	15.00%	13.03%

