# LSTM Előrejelzések

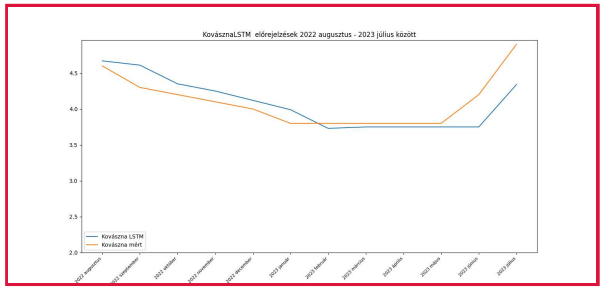
| Kovászna LSTM | |
|---|---|
| **Előrejelzés** | **Valódi adat** |
| 4.67 | 4.60 |
| 4.61 | 4.30 |
| 4.35 | 4.20 |
| 4.25 | 4.10 |
| 4.12 | 4.00 |
| 3.99 | 3.80 |
| 3.73 | 3.80 |
| 3.75 | 3.80 |
| 3.75 | 3.80 |
| 3.75 | 3.80 |
| 3.75 | 4.20 |
| 4.34 | 4.90 |

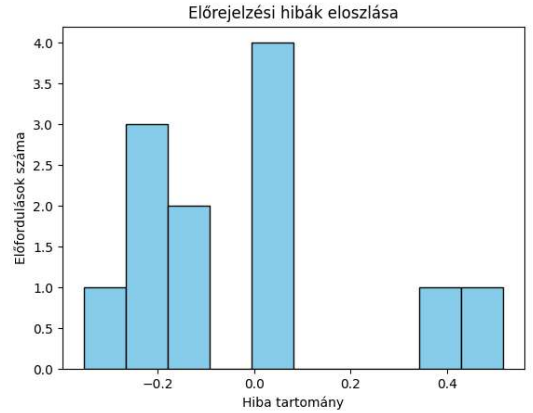
| Hargita LSTM | |
|---|---|
| **Előrejelzés** | **Valódi adat** |
| 3.75 | 3.90 |
| 3.93 | 4.00 |
| 4.02 | 4.20 |
| 4.26 | 4.40 |
| 4.47 | 4.40 |
| 4.45 | 4.50 |
| 4.55 | 4.30 |
| 4.28 | 4.20 |
| 4.14 | 4.00 |
| 3.96 | 3.80 |
| 3.77 | 3.80 |
| 3.82 | 3.70 |

| Maros LSTM | |
|---|---|
| **Előrejelzés** | **Valódi adat** |
| 2.68 | 2.80 |
| 2.74 | 2.90 |
| 2.82 | 3.10 |
| 3.01 | 3.20 |
| 3.17 | 3.20 |
| 3.19 | 3.10 |
| 3.07 | 3.10 |
| 3.06 | 3.00 |
| 3.01 | 2.70 |
| 2.74 | 2.70 |
| 2.71 | 2.70 |
| 2.70 | 2.70 |

## Kovászna LSTM

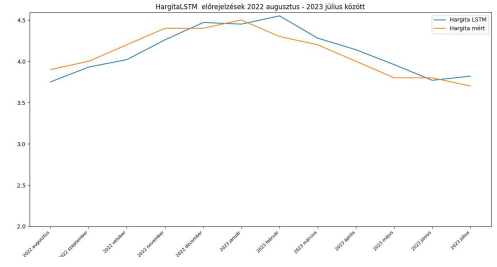
| Előrejelzés | Valódi adat |
|---|---|

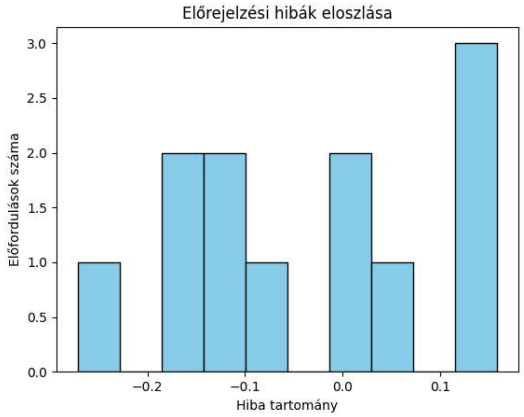



## Hargita LSTM

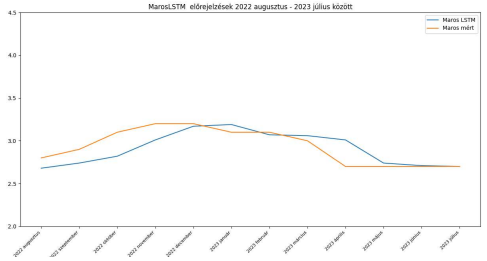
| Előrejelzés | Valódi adat |
|---|---|

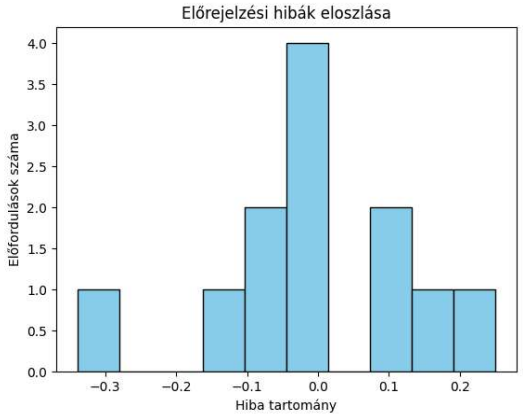


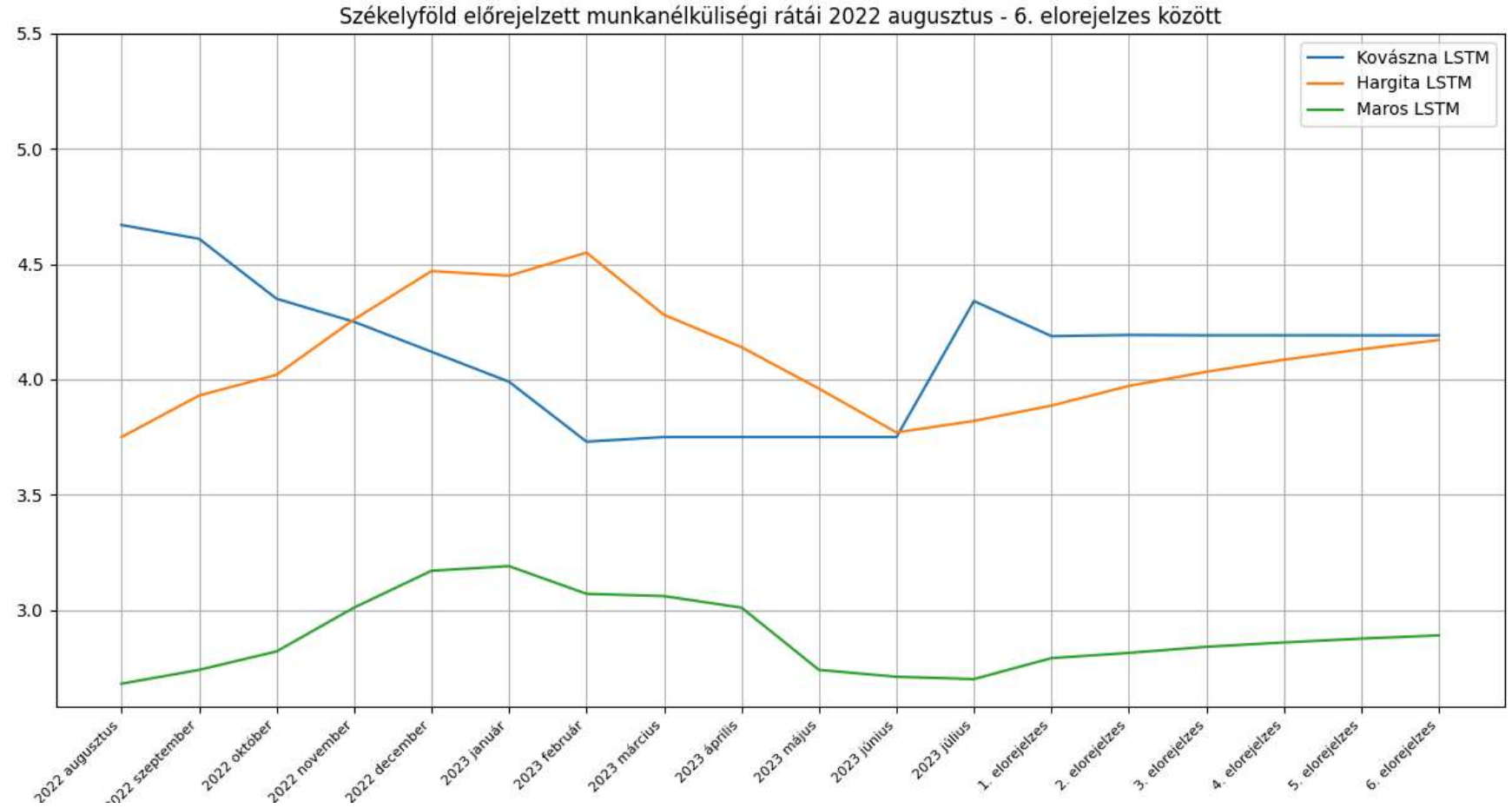

## Maros LSTM

| Előrejelzés | Valódi adat |
|---|---|




| Model | MSE | RRMSE | MAPE |
|---|---|---|---|
| Kovászna LSTM | 6.04 % | 5.98 % | 4.32 % |
| Hargita LSTM | 1.80 % | 3.27 % | 2.94 % |
| Maros LSTM | 2.22 % | 5.07 % | 3.74 % |




Tanító párok: (amiből megtanulta a súlyokat)

Kovászna

training set: x == > y

1.: [[2.78162659] [2.91573908] [2.82633075]] ==> [2.85635675] )

____ [[12.2] [12.5] [12.3]] ==> 11.9

2.: [[2.91573908] [2.82633075] [2.6475141 ]] ==>

Teszt párok: (amiket meg kellett jósolni)

Kovászna

prediction set: x (input) == > y

1.: [[1.97041 ] [0.96661622] [1.30121415]] ==> [1.43476313], joslat: 1.63

___ [[4.7] [4.4] [4.5]] ==> 4.6, joslat: 4.67

[2.47712202] )

____ [[12.5] [12.3] [11.9]] ==> 11.1

3.: [[2.82633075] [2.6475141 ] [2.2898808 ]] ==>

2.: [[0.96661622] [1.30121415] [1.63581207]] ==>
[0.55931444], joslat: 1.48

___ [[4.4] [4.5] [4.6]] ==> 4.3, joslat: 4.61

Tanító párok: (amiből megtanulta a súlyokat)

Hargita

training set: x == > y

1.: [[3.44096625] [3.75623234] [3.63012591]] ==>
[3.71632533] )

____ [[10.9] [11.4] [11.2]] ==> 10.7

2.: [[3.75623234] [3.63012591] [3.31485982]] ==>
[2.95345031] )

____ [[11.4] [11.2] [10.7]] ==> 9.6

3.: [[3.63012591] [3.31485982] [2.62127443]] ==>

Teszt párok: (amiket meg kellett jósolni)

Hargita

prediction set: x (input) == > y

1.: [[-1.6190273 ] [-1.21981509] [-1.21981509]] ==>
[-0.77459667], joslat: -1.37

___ [[3.7] [3.8] [3.8]] ==> 3.9, joslat: 3.75

2.: [[-1.21981509] [-1.21981509] [-0.82060288]] ==>
[-0.38729833], joslat: -0.67

___ [[3.8] [3.8] [3.9]] ==> 4.0, joslat: 3.93

Tanító párok: (amiből megtanulta a súlyokat)

Maros

training set: x == > y

Teszt párok: (amiket meg kellett jósolni)

Maros

prediction set: x (input) == > y

```
1.:   [[2.09301052]   [2.15175364]   [2.21049676]]   ==>
[2.13127915] )
____ [[8.3] [8.4] [8.5]] ==> 8.2

2.:   [[2.15175364]   [2.21049676]   [2.03426741]]   ==>
[1.95080292] )
____ [[8.4] [8.5] [8.2]] ==> 7.9
```

```
1.:  [[-1.64345203]  [-1.14627327]  [-1.14627327]]  ==>
[-0.6761234], joslat: -1.3
___ [[2.6] [2.7] [2.7]] ==> 2.8, joslat: 2.68

2.:  [[-1.14627327]  [-1.14627327]  [-0.6490945  ]]  ==>
[-0.16903085], joslat: -0.99
___ [[2.7] [2.7] [2.8]] ==> 2.9, joslat: 2.74
```