

Hey everyone,

With the recent scoring changes, I thought I'd post some sample code to compute MMC locally using numerai-tools, since it was a bit confusing for me at first.

For those who also use colab I made a notebook that handles setup as well [here](#)

I might still have it wrong, so let me know if any feedback!

Install packages with scoring function and numerapi

```
!git clone https://github.com/numerai/numerai-tools.git !mv numerai-tools/numerai_tools/scoring.py /content/ !pip install numerapi
```

```
from numerapi import NumerAPI import pandas as pd
```

```
napi = NumerAPI()
```

```
napi.list_datasets()
```

Download example predictions, meta model preds, and live targets

```
napi.download_dataset("v4.2/meta_model.parquet") napi.download_dataset("v4.2/validation_benchmark_models.parquet", "validation_benchmark_models.parquet") napi.download_dataset("v4.2/validation_int8.parquet")
```

```
df_mm = pd.read_parquet("v4.2/meta_model.parquet")
```

Get eras that have data from meta model

```
mm_eras = df_mm["era"].unique()
```

```
bm_val = pd.read_parquet("validation_benchmark_models.parquet")
```

Get bechmark predictions only for eras that have meta model data

```
bm_val_recent = bm_val.loc[bm_val["era"].isin(mm_eras)]
```

Do the same for live targets

```
live_targets = pd.read_parquet("v4.2/validation_int8.parquet", columns=["era", "target"]) live_targets_recent = live_targets.loc[live_targets["era"].isin(mm_eras)]
```

```
from scoring import correlation_contribution
```

correlation_contribution(predictions: pd.DataFrame, meta_model: pd.Series, live_targets: pd.Series)

```
mmc = correlation_contribution(bm_val_recent, df_mm["numerai_meta_model"], live_targets_recent["target"])
```