02a-Plot-Performances

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0.1 Comparing Performances of Released Iterations of MAli

To reproduce the results for any of the individual aligners featured in the plot, run the associated notebook to completion.

For example, to record results for MAli v0.1, run `01a_MAli-v0.1.ipynb` to completion.

Running any of the individual notebooks that record performances will remove the previously recorded results for the associated aligner.

Imports

[1]:
```
from lib_analysis import ExperimentReader
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

Creating Plot

[2]:
```
ROOT_DIRECTORY = "results"
VERSIONS = ["MAli-v0.1","MAli-v0.2","MAli-v1.0","MAli-v1.1","MAli-v1.
 ↪2","MAli-v1.21","MAli-v1.3","MAli-v1.31"]
LABELS = ["v0.1", "v0.2", "v1.0", "v1.1", "v1.2", "v1.21", "v1.3", "v1.31"]
COLOURS = ["tab:red", "#9FE2BF", "#40E0D0", "#6495ED", "cornflowerblue",␣
 ↪"royalblue", "navy", "black"]
MARKERS = ['x', '.', '.', '.', '.', '.', '.', '.']
```

[3]:
```
reader = ExperimentReader(ROOT_DIRECTORY, VERSIONS)
for i in range(0, len(VERSIONS)):
    df = reader.get_dataset_for_version(VERSIONS[i])
    plt.plot('mean_secs_elapsed', 'mean_q_score', data=df, linestyle="--",␣
 ↪marker=MARKERS[i], label=LABELS[i], color=COLOURS[i], markersize=10)


plt.ylim([0, 0.5])
plt.xlim([-0.75, 9.25])
plt.xlabel("avg. time elapsed (s)")
plt.ylabel("avg. quality score")
plt.title("MAli Performances on BALIS-2")
plt.legend(loc="upper right")
```

```
plt.savefig("images/MAli_performances_BALIS-2")

plt.show()
```