

# Assignment 4

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## Exploring conformal prediction using TorchCP

In this assignment, you are expected to have a try on a frontier ML research problem – conformal prediction. In particular, you should use the TorchCP library to compare the performance of various CP scores and predictors in their settings. Evaluating on diverse datasets is encouraged. Through this task, you can learn how to quickly implement AI algorithms on new datasets using existing library.

## Description - Results – Discussion - Conclusion

- Description: describe the task of conformal prediction and the chosen algorithms in this section.
- Performance evaluation: present the results of the performance evaluation, including comparisons in the size of prediction sets and coverage, using tables, charts, or graphs.
- Discussion and analysis: analyzes and interprets the results obtained from the algorithms, compares their performance, discusses their strengths and limitations, and highlights any unexpected or interesting observations.
- Conclusion: Any issues, inconvenient points and potential future improvements of TorchCP are suggested.

Please includes citations for any external sources, references, or research papers used in the report, following the appropriate citation style.