A Machine Learning project for Grammar Checking

Using Deep Learning techniques, Python 3 and the PyTorch library, develop an ML algorithm that can detect a misused word in its context of appearance and propose the correct alternative. For instance, consider the words "their", "they're" and "there" which are pronounced almost the same. People learning English as a Second Language (ESL students) have trouble sometimes using the correct instance of these homophones.

Take the following correct sentences:

> **There** they saw something extraordinary, far exceeding what they knew.

> **Their** knowledge of those facts was incomplete.

> **They're** going to learn something new from the ML course.

It is easy to obtain incorrect sentences out of these:

> * _They're_ they saw something extraordinary, far exceeding what they knew.

> * _There_ knowledge of those facts was incomplete.

> * _Their_ going to learn something new from the ML course.

To complete this project, the candidate must:

- Collect relevant data from the internet (not in large amounts, the proof of concept is what is important).
- Develop the ML algorithm, train and evaluate it against test data, providing performance measures.
- Do the project in Python 3, using the PyTorch library and post the code privately in GitLab/GitHub or similar sites for external evaluation.