CS 577 — Deep Learning — Peer Grading Rubric

Fall 2024

INSTRUCTION FOR PEER REVIEW: Score the project submission based on the following criteria. Score of 0 = "this part was not included/discussed in the project submission". Score of 1-6 = "poor". Score of 7 = "acceptable". Score of 8 = "good". Score of 9-10 = "excellent".

- **[Score between 0 and 10]** for **Background**:
    - Explain clearly the motivation: the problem does the paper seek to address
    - Explain the key breakthrough of the paper: which innovations enabled the paper to resolve the problem

- **[Score between 0 and 10]** for **Model architecture**:
    - Analysis: Use diagrams/visualizations of the model together with code to explain the model, part-by-part
    - Synthesis: Use a diagram/visualization of the model together with code to explain how the parts come together

- **[Score between 0 and 10]** for **Model training**: Explain the training loop and its sub-parts. For instances, in "The Annotated Transformer", the authors of the blog discussed "Optimizer" and "Regularization", among several other items. There is no standard set of parts to a training loop. But be as thorough as possible in explaining all the training techniques that are used.

- **[Score between 0 and 10]** for **Minimal CPU-ready working example** (MWE-CPU).

    - Create a small synthetic dataset OR find a small real world dataset suitable for the model
    - Create a miniaturized version of the model that trains on a laptop. You can achieve this by reducing the number of parameters/layers/width/floating point precision/or all of the above. "Everything should be made as simple as possible, but no simpler."
    - Train the miniaturized model on the small dataset and discuss the training process and outcome. Note: our grading criteria is not with respect to the model's performance. Instead, we are looking for maximizing our understanding.

- **[Score between 0 and 10]** for **Discussion**: Weaknesses/limitations/future directions.

INSTRUCTION FOR PEER REVIEW: Score the project submission based on the following yes/no criteria.

- **[Score 0 for (no) and 10 for (yes)]** Is the paper published in one of the **approved venues** in the syllabus?

- **[Score 0 for (no) and 10 for (yes)]** Does the project **meet the submission deadline**?