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Methods/Experimentation Outline

Preparing for Your Writing

Instructions

1. Recalling the info from your research paragraph, expand your experimental procedure into an outline below
2. Feel free to use the papers you read as a guide for proper headings for your sections
3. Expand the outline if necessary

Paragraph Brainstorming Notes

Week 1 Explaining your lab and your research, Week3: Research Paragraph

What is the main problem you are trying to solve?	<ul style="list-style-type: none"> ● Improved decoding performance using deep neural network ● Improved complexity using deep neural network <ul style="list-style-type: none"> - Adjust performance and complexity in tradeoff relationship.
What experimentation or tests do you perform to solve/learn about this problem?	<ul style="list-style-type: none"> ● Simulation: python (one of programming language, popular language for deep learning research) <ul style="list-style-type: none"> - Using tensorflow, keras : it is framework for deep learning. - Reason for doing simulation experiments is because my research topic is communication system and study of software & algorithms, so I don't do physical experiments.

Outlining Space

- I. Overview research goals
 - A. improving complexity (복잡도 개선)
 - Mention about prior research and methods aimed at improving complexity.
 - B. improving performance (성능 향상)
- II. Summary/Overview of major experimentation steps
 - A. Trends, limitation in previous research
 - B. motivation
 - C. summary of proposed method
- III. Procedure 1 (based on goal A)
 - A. Details (Simulation's **Setting**, method, **parameter**)
 - B. Reference to prior research methods (**difference** from prior research and prior research's **limitation**)

- C. Quality and Care of procedure (Quality : **compare** performance result with prior research, **Analysis** of simulation results)
 - D. Differences from procedure 1.
- IV. Procedure 2 (based on goal B)
 - A. Details (Simulation's **Setting**, method, **parameter**)
 - B. Reference to prior research methods (**difference** from prior research and prior research's **limitation**)
 - C. Quality and Care of procedure (Quality : **compare** performance result with prior research, **Analysis** of simulation results)
- V. Limitations or boundaries of experimentation
 - A. Future work (향후 연구 주제 : a subject, direction of future research)
 - B. Limitation (해당 방법의 한계 : Limitations of the method)