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**Methods/Experimentation Outline**

Preparing for Your Writing

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| 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

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| Paragraph Brainstorming Notes |

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

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| What is the main problem you are trying to solve? | * Improved decoding performance using deep neural network * Improved complexity using deep neural network * Adjust performance and complexity in tradeoff relationship. |
| What experimentation or tests do you perform to solve/learn about this problem? | * Simulation: python (one of programming language, popular language for deep learning research) * 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. |

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| Outlining Space |

1. Overview research goals
   1. improving complexity (복잡도 개선)

* Mention about prior research and methods aimed at improving complexity.  
  1. improving performance (성능 향상)

1. Summary/Overview of major experimentation steps
   1. Trends, limitation in previous research
   2. motivation
   3. summary of proposed method
2. Procedure 1 (based on goal A)  
   1. Details (Simulation’s **Setting**, method, **parameter**)
   2. Reference to prior research methods (**difference** from prior research andprior research’s **limitation**)
   3. Quality and Care of procedure (Quality : **compare** performance result with prior research, **Analysis** of simulation results)
   4. Differences from procedure 1.
3. Procedure 2 (based on goal B)
   1. Details (Simulation’s **Setting**, method, **parameter**)
   2. Reference to prior research methods (**difference** from prior research andprior research’s **limitation**)
   3. Quality and Care of procedure (Quality : **compare** performance result with prior research, **Analysis** of simulation results)
4. Limitations or boundaries of experimentation
   1. Future work (향후 연구 주제 : a subject, direction of future research)
   2. Limitation (해당 방법의 한계 : Limitations of the method)