

# Deep Learning

Tian-Sheuan Chang

- |  |   |
|--|---|
| 1. <a href="#">Introduction</a>                            | 13. <a href="#">Transformer</a>             |
| 2. <a href="#">Computer vision on image classification</a> | 14. <a href="#">Vision transformer</a>      |
| 3. <a href="#">Neural network</a>                          | 15. <a href="#">Pruning I</a>               |
| 4. <a href="#">CNN</a>                                     | 16. <a href="#">Pruning II</a>              |
| 5. <a href="#">Training a neural network</a>               | 17. <a href="#">Quantization</a>            |
| 6. <a href="#">Better accuracy I</a>                       | 18. <a href="#">Tensor decomposition</a>    |
| 7. <a href="#">Better accuracy II</a>                      | 19. <a href="#">Low complexity model I</a>  |
| 8. <a href="#">Gradient descent optimization</a>           | 20. <a href="#">Low complexity model II</a> |
| 9. <a href="#">Regularization</a>                          | 21. <a href="#">Semantic segmentation</a>   |
| 10. <a href="#">Advanced CNN architecture I</a>            | 22. <a href="#">Object detection I</a>      |
| 11. <a href="#">Advanced CNN architecture II</a>           | 23. <a href="#">Object detection II</a>     |
| 12. <a href="#">RNN</a>                                    |   |

October 11, 2025