# Understanding LSTM and GRU

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Profilierungsmodul II

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**The next session will be organized as a discussion on LSTM and GRU networks, please read the suggested material. You don't have to hand anything in this week, but please be prepared to answer the questions below.**

- **Reading:**
  Foundation of the discussion session will be Chapter 10 of the Deep Learning Book (`http://www.deeplearningbook.org/contents/rnn.html`). If you do not want to read the whole chapter, you can focus on the following parts:

    - Foundations: Beginning of Ch. 10 to Ch. 10.2.1 (inclusive)

    - Long-term dependencies: Ch. 10.7

    - Gated RNN's: Ch. 10.10

- **Tutorials:**

    - LSTMs:
      `http://colah.github.io/posts/2015-08-Understanding-LSTMs/`

    - GRUs:
      `https://towardsdatascience.com/understanding-gru-networks-2ef37df6c9be/`

- **Questions:**
  What are the most important building blocks? What are the main interactions? What are justifications and intuitions behind those choices? What is still unclear to you?