Digital Circuit Fall 2019
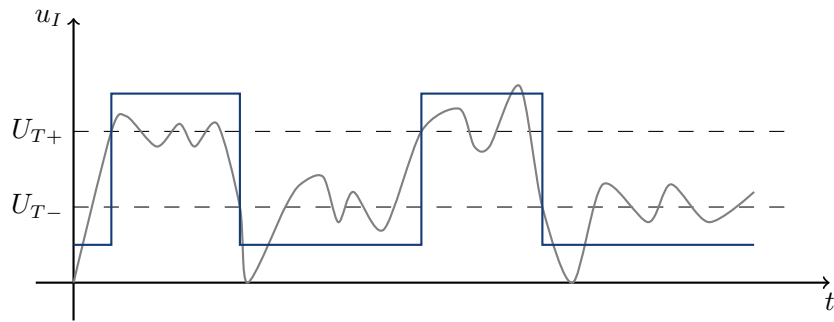
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Session 6 - Pulse generating and shaping

Session 1 Homework

● **Problem 1 - 9.1** Give the waveform of u_0 .

● **Problem 2 - 9.5** Given a 74121 connected as shown.

1.Calculate the range of delay time

$$CR \leq t_d \leq C(R + R_W)$$
$$3.57ms \leq t_d \leq 18.97ms$$

2.What's the functionality of the resister next to R_w?

It prevents short circuit when R_w is set to 0.

● **Problem 3 - 9.8**

1.Analyse the status of Fig9.8 when S is open.
2.
3.

● **Problem 4 - 9.13** .

Session 7 - Sequential circuit and unit

Session 2 Homework

● **Problem 1 - 10.2** .

● **Problem 2 - 10.6** .

● **Problem 3 - 11.3** .

● **Problem 4 - 11.12** .