

Discrete Event Systems

Exercise session #2



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Solutions for the first exercise session are available on the website

Exercise Proceedings

At the beginning of every lecture week, we will publish a new exercise sheet [here](#). This exercise sheet is intended to be solved during the exercise session on Thursday where two tutors will be available to assist you and to answer potential questions. *The exercises often require information from the lecture notes, so please make sure that you have them available in some way.*

You can hand in your solutions for correction after the exercise session on a voluntary basis. But this is not mandatory or required to be admitted to the exam.

Old Exams

If you would like some more exercises, you can also have a look at older exams (some with solutions): [HS 2018](#), [HS 2017](#), [HS 2016](#), [HS 2015](#), [HS 2014](#), [HS 2012](#), [HS 2011](#), [HS 2010](#), [HS 2009](#), [HS 2008](#) or [HS 2007](#).

Please keep in mind that the content of the lecture has been updated a few times in recent years! Thus, some of the material from the old exams might no longer be covered in the current lecture and additional material has been added.

Lecture Material

Chapter Title	Lecturer	Lecture Notes	Exercises	Responsible Assistant	Additional Material
Chapter 0 Introduction 17.09.2020	Laurent Vanbever	PDF 1:1 PDF 4:1	---	---	---
Chapter 1 Automata and Languages (Part 1) 17.09.2020	Laurent Vanbever	PDF 1:1 PDF 4:1	Exercises Slides Solutions	Thomas Holterbach Roland Schmid	Lecture Recording Exercise Recording
Chapter 2 Automata and Languages (Part 2) 24.09.2020	Laurent Vanbever	PDF 1:1 PDF 4:1	Exercises	Thomas Holterbach Roland Schmid	

Today, we will follow the same process as last week

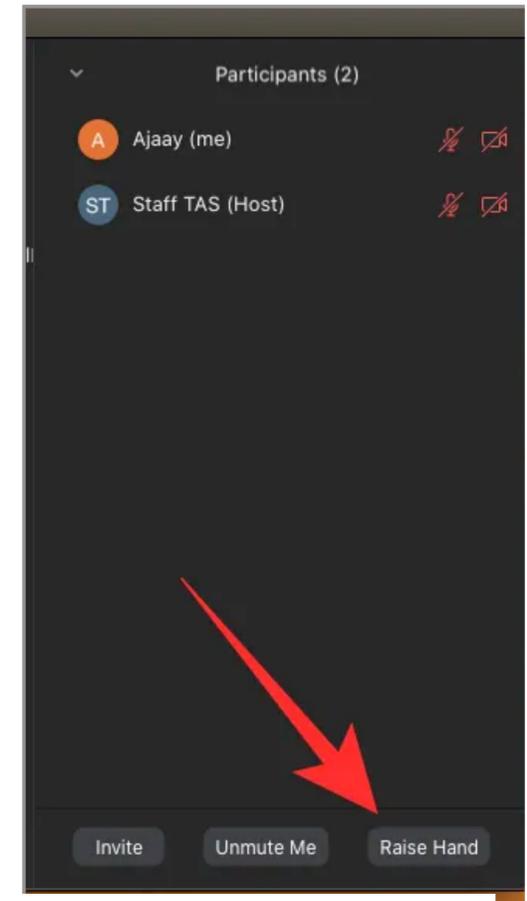
We will try to make this session interactive

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We will try to make this session interactive

Step #1: you try to solve the exercise

Once you have it solved, raise your virtual hand in Zoom



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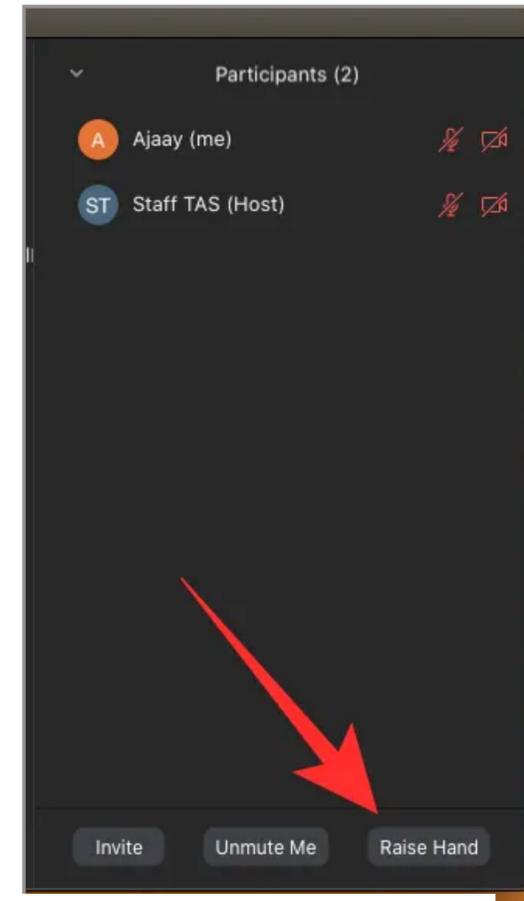
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Step #1: you try to solve the exercise

Once you have it solved, raise your virtual hand in Zoom

Step #2: one of you volunteer to present its solution to the class

To do that please share your screen **and describe your solution**



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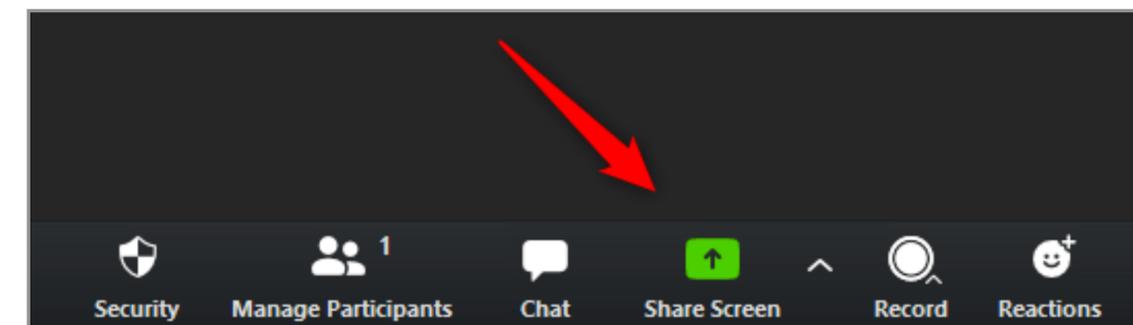
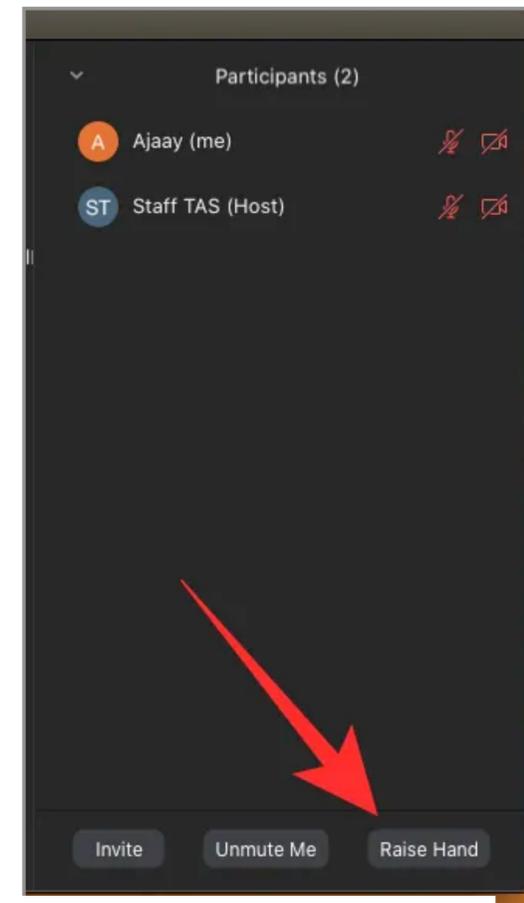
Once you have it solved, raise your virtual hand in Zoom

Step #2: one of you volunteer to present its solution to the class

To do that please share your screen **and describe your solution**

Step #3: we will discuss and correct the proposed solution

You can ask questions using the in-meeting Zoom chat



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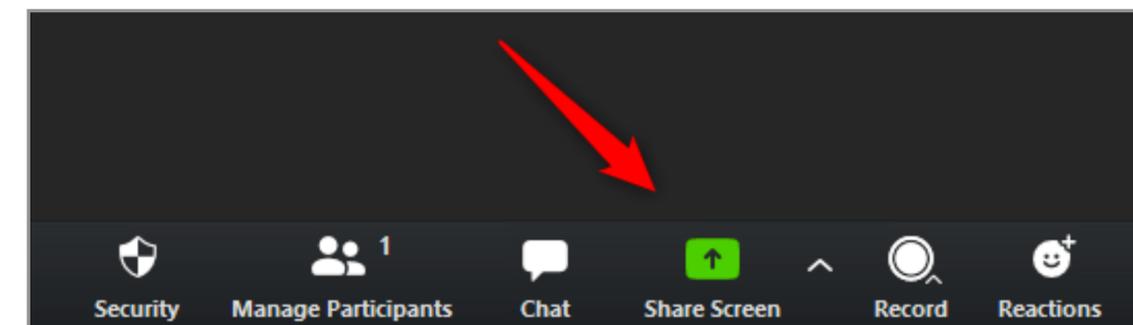
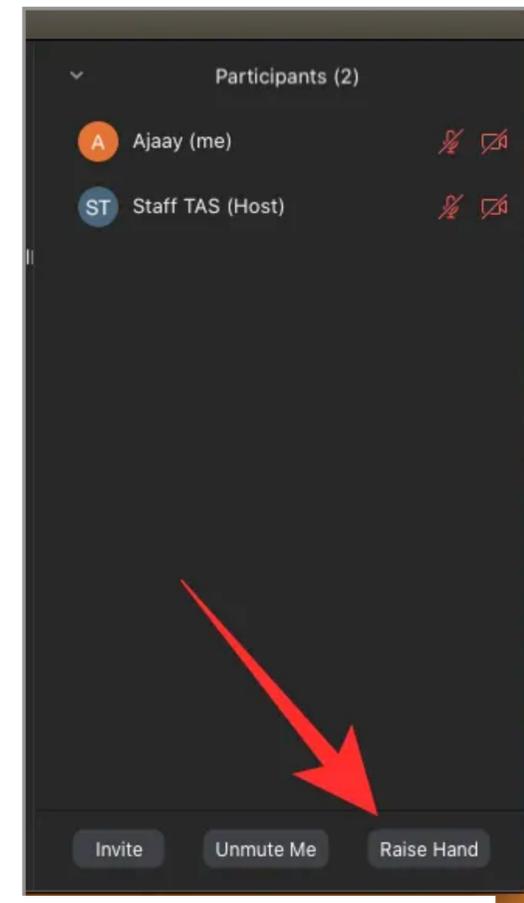
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Step #4: do not forget to put your virtual hand down when we move to the next question



In this exercise session, we will play with NFA, regular expressions and GNFA

