Automata, Languages and Computation Academic Year 2023-24

Course presentation & information

Master Degree in Computer Engineering
University of Padua
Lecturer: Giorgio Satta

https://stem.elearning.unipd.it/course/view.php?id=6403

Lecturer

Giorgio Satta

satta@dei.unipd.it

http://www.dei.unipd.it/~satta/

Class hours

Wed 10:30-12:30, under email appointment

DEI/G, fourth floor

Zoom Meeting https://unipd.zoom.us/j/99361872422

Schedule

| | Tue | Wed | Fri |
|-------------|---------|--------------|---------|
| 10:30-11:30 | | office hours | |
| 11:30–12:30 | | office hours | |
| 12:30-13:30 | room Ae | room Ce | room Ae |
| 13:30–14:30 | room Ae | room Ce | room Ae |

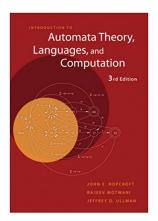
Textbook

Introduction to Automata Theory, Languages, and Computation John E. Hopcroft, Rajeev Motwani, Jeffrey D. Ullman Third edition, Pearson New International Edition (Europe)



Textbook

Introduction to Automata Theory, Languages, and Computation John E. Hopcroft, Rajeev Motwani, Jeffrey D. Ullman Third edition, Addison-Wesley Longman Publishing Co. (United States, same content)



Course material

Exercise collection with **solutions**, available through class home page



University of Padua

Department of Information Engineering Master Degree in Computer Engineering

Automata, Languages and Computation

SELECTED EXERCISES
WITH SOLUTIONS

Course material

Additional resources, consultation only

- Electronic forum for technical discussion
- Introduction to the Theory of Computation Michael Sipser
 Thomson Course Technology

Honour code

Home assignments to be worked out individually

No use of solutions from previous academic years

No use of textbook/class notes during finals

Content outline

| | <u> </u> | |
|------------------------|------------|----------|
| Turing machines | Chpts 8-10 | 24 hours |
| Context-free languages | Chpts 5–7 | 22 hours |
| Regular languages | Chpts 2-4 | 24 hours |
| Preliminaries | Chpt 1 | 02 hours |

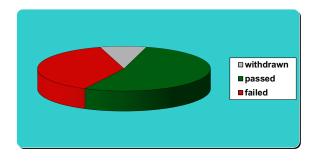
72 hours

Final exam

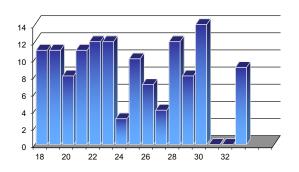
Written test, no oral test

Public correction at the end of final test; students with strongly negative evaluation are kindly requested to withdraw their own test

Some statistics



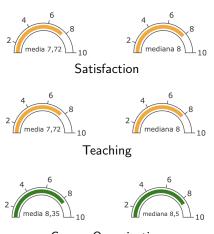
Some statistics



Some statistics

| | w/d | subm | fail | pass | acpt |
|------------|-----|------|------|------|------|
| 01/25/2023 | 14 | 107 | 40 | 67 | 63% |
| 02/13/2023 | 04 | 88 | 42 | 46 | 52% |
| 07/03/2023 | 01 | 28 | 14 | 14 | 50% |
| 13/09/2023 | 05 | 31 | 10 | 21 | 67% |

Evaluation



 ${\it Course\ Organization}$

