## THEORETICAL COMPUTER SCIENCE - PROF. A.MORZENTI - TEACHING SCHEDULE A.Y.2021-22 please consider that the topics of the lessons might change without notice

Week from 13/09/21	Tuesday: 15:15-17:15 Room 25.S.3 Team1 (odd person code) 14/09/21	Wednesday: 14:15-17:15 - VIRTUAL ROOM entire class 15/09/21	Thursday: 15:15-17:15 Room 26.16 ENTIRE CLASS 16/09/21
1		THEORY: models and languages, finite automata and transducers	EXERCISE: Finite automata
20/09/21	21/09/21	22/09/21	23/09/21
2	EXERCISE: Finite automata	THEORY: pumping lemma, closure properties of RL, pushdown automata	EXERCISE: Pushdown automata
27/09/21	28/09/21	29/09/21	30/09/21
3	EXERCISE: Pushdown automata	THEORY: pushdown automata, Turing machine: equivalences and closure properties; nondeterministic models, grammars	EXERCISE: TM and intro to ND
04/10/21	05/10/21	06/10/21	07/10/21
4	EXERCISE: TM and intro to ND	THEORY: relation between grammars and automata; mathematical logic to define languages, program and system properties	GRADUATION OR MIDTERM EXAMS
11/10/21	12/10/21	13/10/21	14/10/21
5		THEORY: computability, termination problem	EXERCISE: ND and grammars
18/10/21	19/10/21	20/10/21	21/10/21
6		THEORY: computability, undecidable problems, decidable and semidecidable sets	EXERCISE: Mathematical Logic
25/10/21	26/10/21	27/10/21	28/10/21
7		THEORY: Rice theorem, undecidability proof techniques;	EXERCISE: Mathematical Logic
01/11/21	02/11/21	03/11/21	04/11/21
8		THEORY: Complexity: introduction	EXERCISE: computability
08/11/21	09/11/21	10/11/21	11/11/21
9	GRADUATION OR MIDTERM EXAMS	GRADUATION OR MIDTERM EXAMS	EXERCISE: computability
15/11/21	16/11/21	17/11/21	18/11/21
10		THEORY: linear speedup; complexity with the RAM, logarithmic cost,	EXERCISE: complexity
22/11/21	23/11/21	24/11/21	25/11/21
11		THEORY: polynomial correlation, nondeterminism and complexity, P and NP, NP-completeness	EXERCISE: complexity
29/11/21	30/11/21	01/12/21	02/12/21
12			
06/12/21	07/12/21	08/12/21	09/12/21
13	HOLIDAY	HOLIDAY	
13/12/21	14/12/21	15/12/21	16/12/21
14			
20/12/21	21/12/21	22/12/21	23/12/21

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