

CS-470 – Advanced Computer Architecture

SIN, SEL, and SSC MSc

Computer Engineering Specialization and Minor

Spring 2021

Week	Date	Time	Room	Theory	Labs	Homeworks
1	Mo 22.02.21	13h - 16h	video	Introduction Exploiting ILP Dynamically — Pipelining		
2	Mo 01.03.21	13h - 16h	video	Exploiting ILP Dynamically — OOO Superscalars		
	Mo 01.03.21	16h - 18h	Zoom		SimpleScalar: ILP and Scheduling	Set #1 distributed
3	Mo 08.03.21	13h - 16h	video	Exploiting ILP Dynamically — Renaming Registers Exploiting ILP Dynamically — Prediction and Speculation		
4	Mo 15.03.21	13h - 16h	video	Exploiting ILP Dynamically — Prediction and Speculation		
	Mo 22.03.21	16h - 18h	Zoom		SimpleScalar: Speculation	Set #1 due
5	Mo 22.03.21	13h - 16h	video	Exploiting ILP Dynamically — Simultaneous Multithreading Exploiting ILP Statically — VLIW Architectures		
	Mo 22.03.21	16h - 18h	Zoom		Trimaran: VLIW and Loop Unrolling	Set #2 distributed
6	Mo 29.03.21	13h - 16h	video	Exploiting ILP Statically — VLIW Architectures Exploiting ILP Statically — Compiler Techniques for VLIWs and IA-64		
	Mo 29.03.21	16h - 18h	Zoom		Trimaran: Predication and Modulo Scheduling	
7	Mo 12.04.21	13h - 16h	video	Dynamic Binary Translation Application-Specific Computing — Instruction Set Extensions and High Level Synthesis		Set #2 due
8	Mo 19.04.21	13h - 16h	video	Application-Specific Computing — Instruction Set Extensions and High Level Synthesis		
	Mo 19.04.21	16h - 18h	Zoom		Xilinx Vivado HLS: Design Optimization	Set #3 distributed
9	Mo 26.04.21	13h - 16h	video	Application-Specific Computing — Limitations of High Level Synthesis and Dataflow		
	Mo 26.04.21	16h - 18h	Zoom		Xilinx Vivado HLS: Homework Set #3 support	
10	Mo 03.05.21	13h - 16h	video	Application-Specific Computing — Digital Signal Processors Application-Specific Computing — Compilers and DSPs		Set #3 due
11	Mo 10.05.21	13h - 16h	video	Security		
	Mo 10.05.21	16h - 18h	Zoom		Security Lab #1	
12	Mo 17.05.21	13h - 16h	video	Security		
	Mo 17.05.21	16h - 18h	Zoom		Security Lab #2	Set #4 distributed
13	Mo 24.05.21	13h - 16h	video	no course		
14	Mo 31.05.21	13h - 16h	video	Security		Set #4 due