CST 223
Concepts of
Programming Languages

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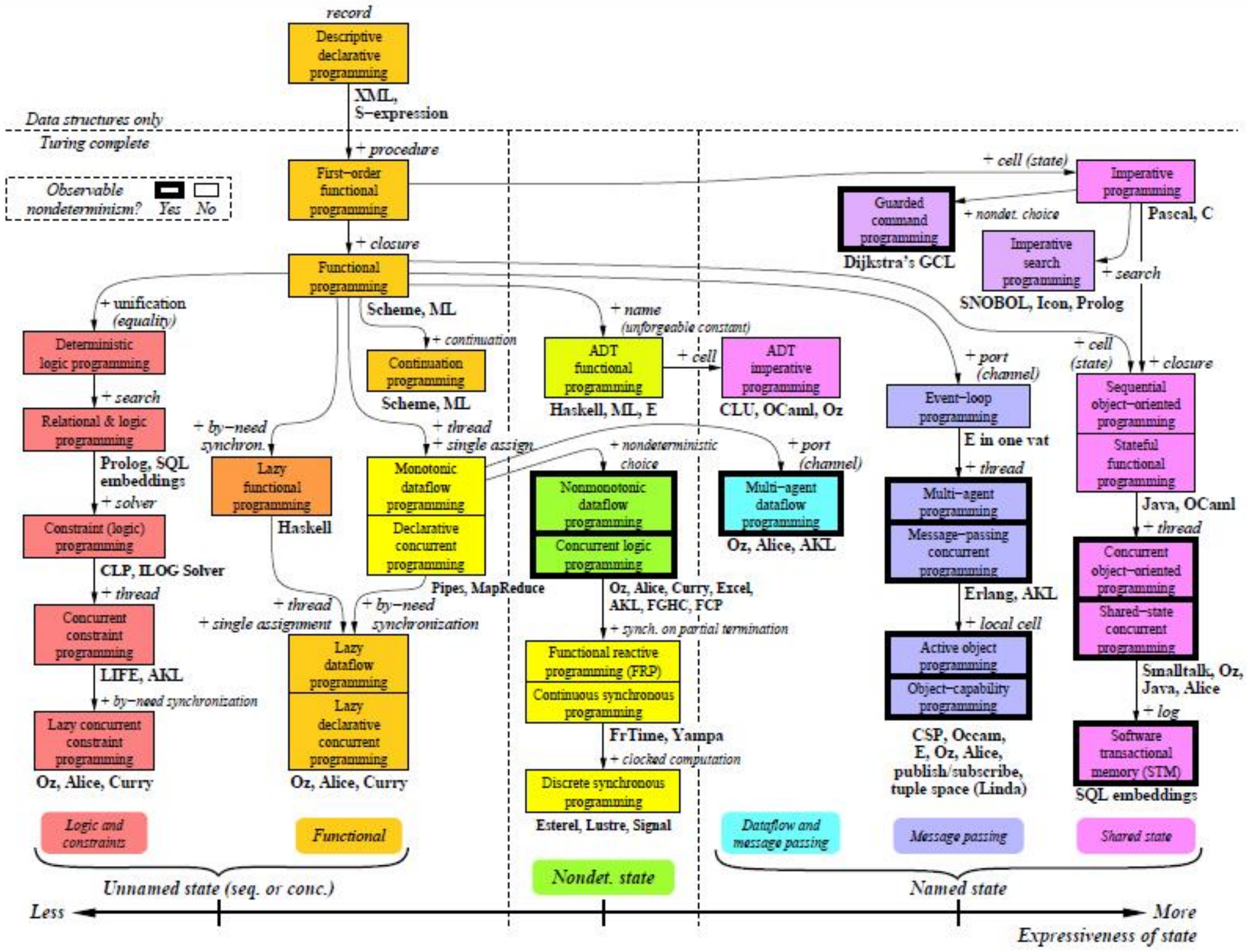
Pv 182

Concepts, Techniques, and Models of Computer Programming



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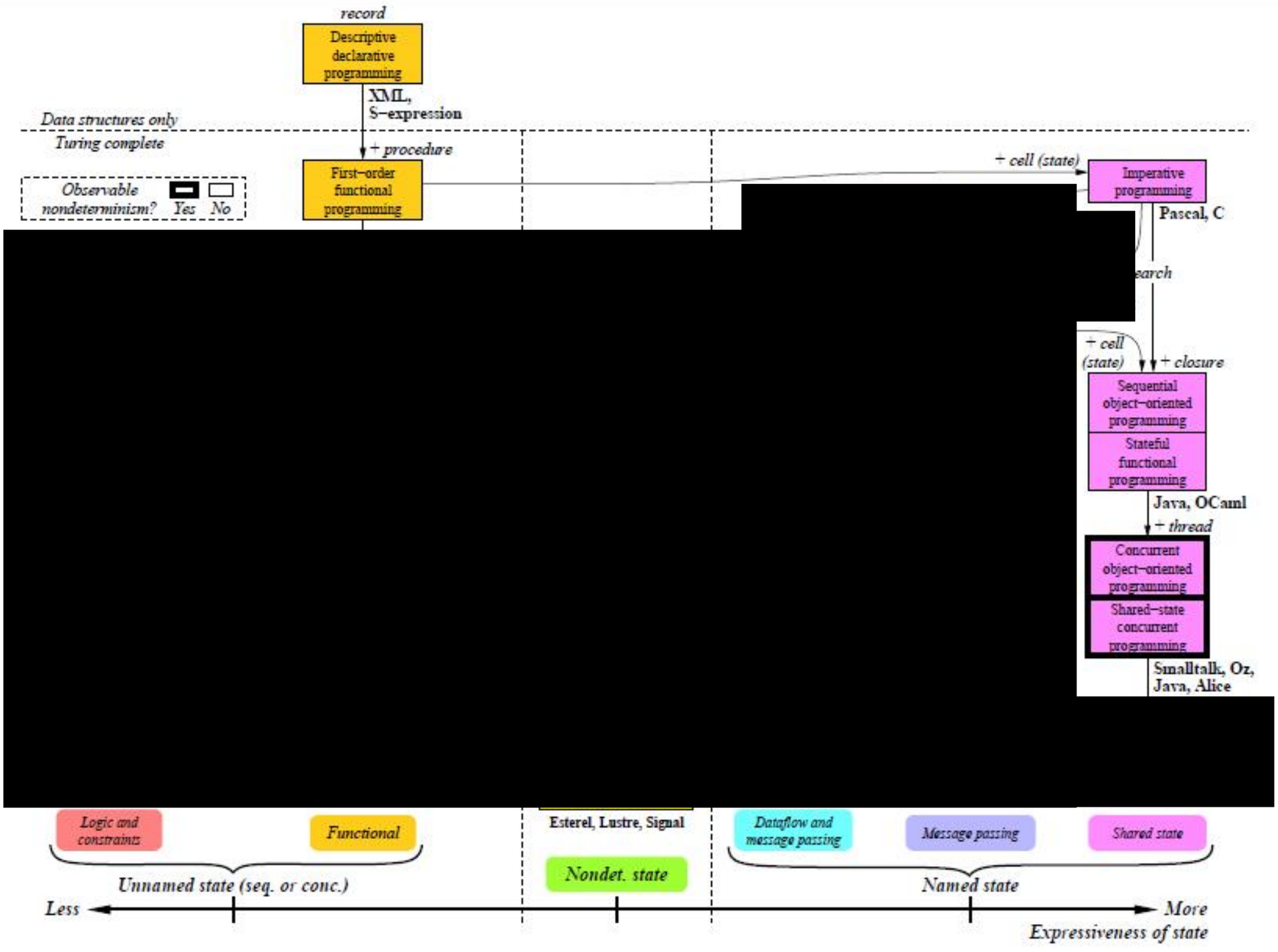

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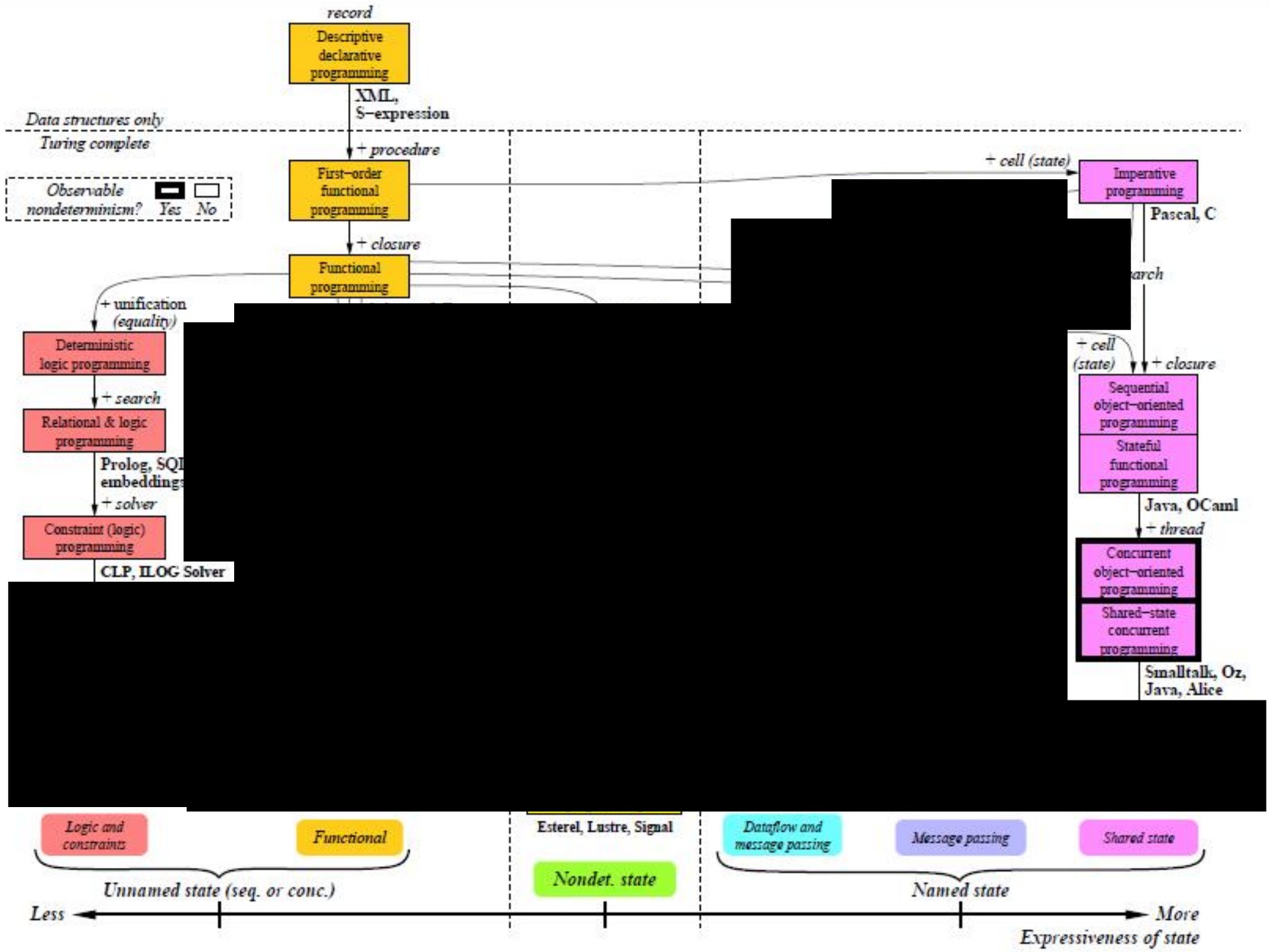


Constraint Satisfaction Problem (CSP)

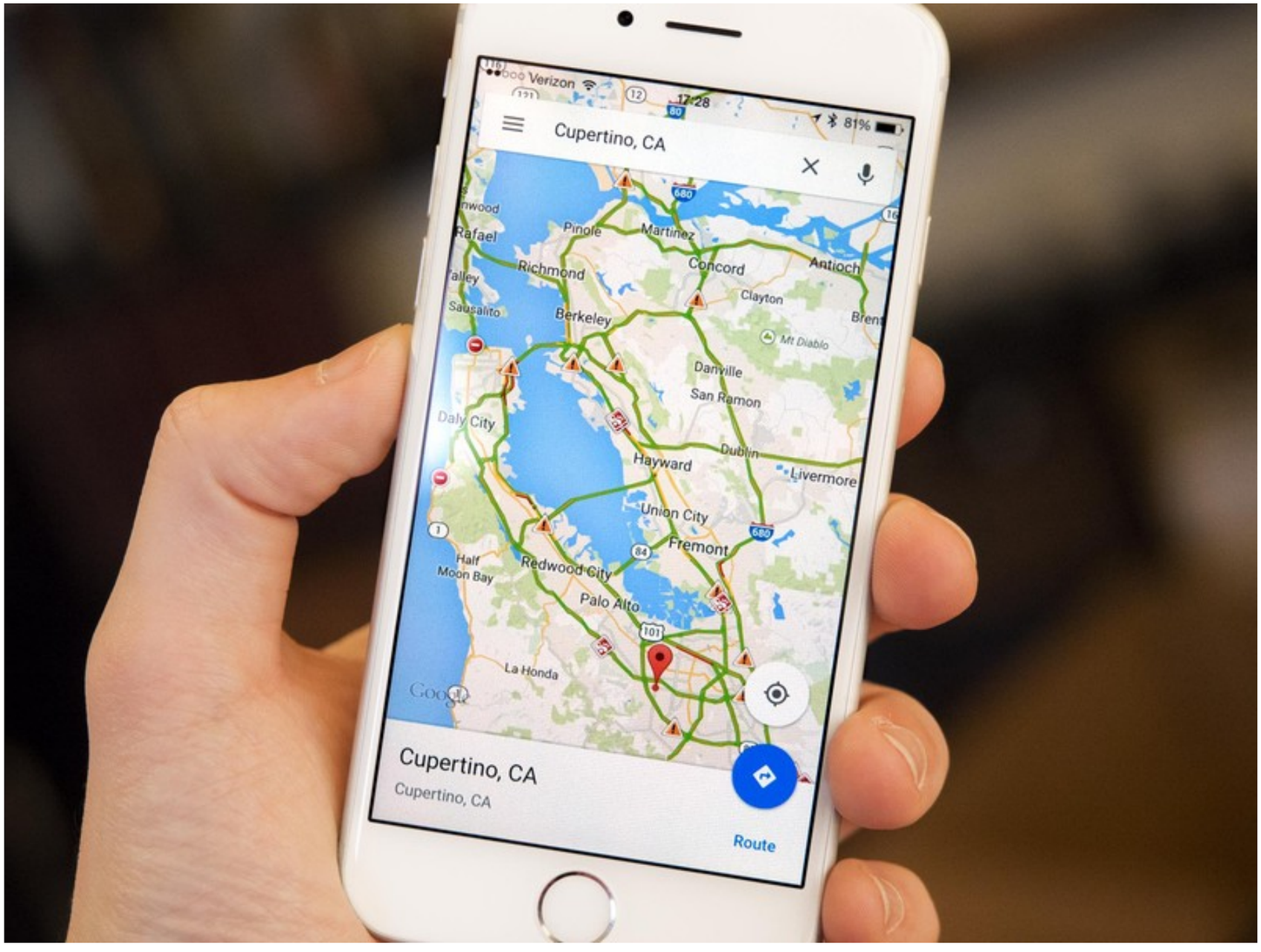
Type of Logic Programming

Scheduling

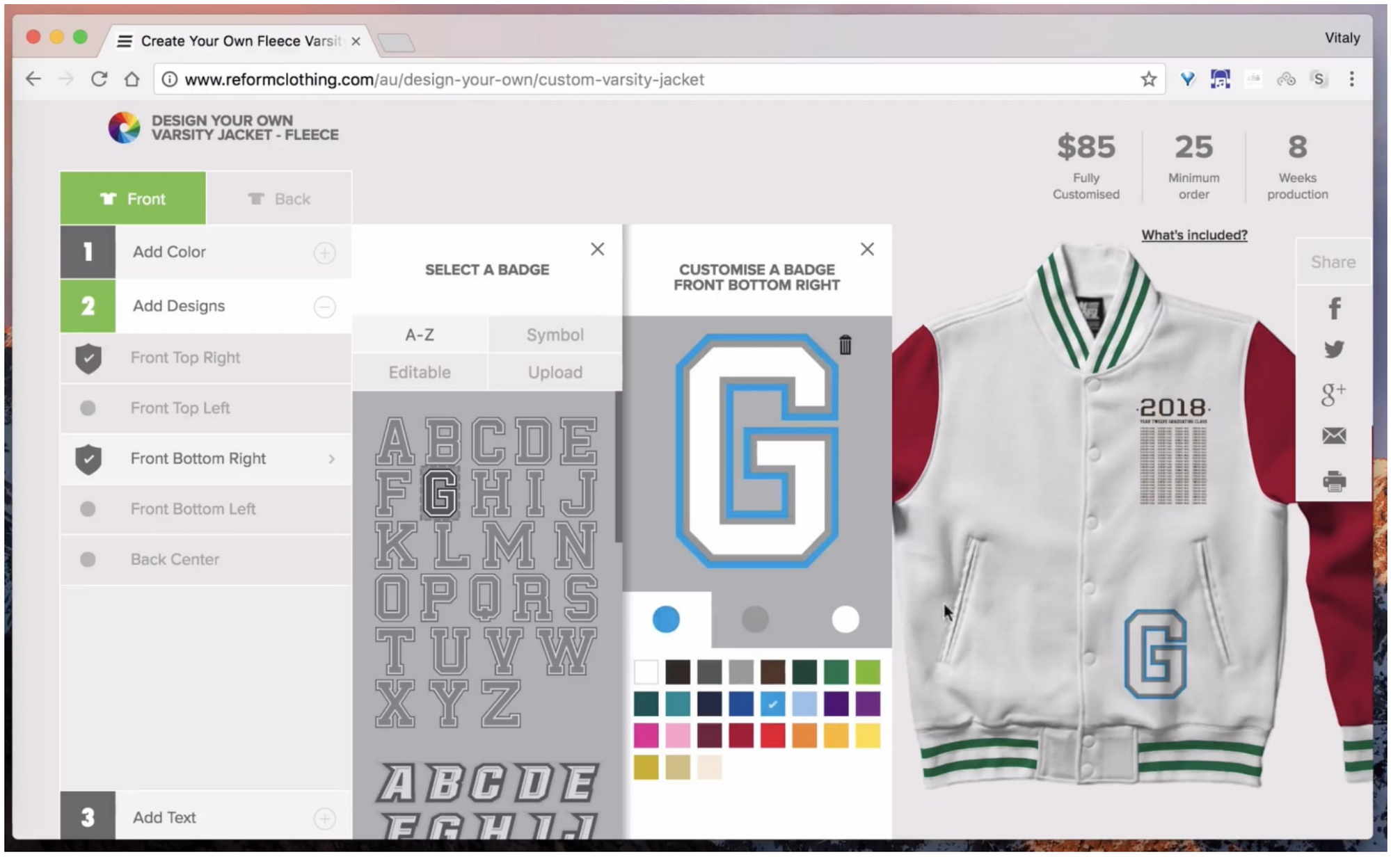
	Mon	Tue	Wed	Thu	Fri
9:00				Linux Programming LAB	
10:00					
11:00		223 Programming Languages LAB		240 Linux Programming LAB	
12:00	Office Hour		Office Hour		Office Hour
1:00					
2:00	223 Languages		223 Languages		
3:00	240 Linux	223 Programming Languages LAB	240 Linux		240 Linux
4:00					
5:00					
6:00					

Planning

Vehicle Routing



Configuration



Class Project

- Pick any language that is not covered in the labs
- Small groups (2-3 people)
- Learn the language
- Write a small project using the language
- 10 minute presentation (final lab)
  - Penultimate lab is open for working on this project

Logic Programming

- Declarative (Descriptive) vs Imperative
- First-order Predicate Calculus
- Logic Statements (true or false)

Horn Clauses

- Named after Alfred Horn
- a1 and a2 and … and an -> b

  mammal(x) and not legs(x, 2) -> legs(x, 4)
  mammal(x) and not legs(x, 4) -> legs(x, 2)

Unification

mammal(x) and not legs(x, 2) -> legs(x, 4)
mammal(x) and not legs(x, 4) -> legs(x, 2)

- Instantiate the variables (allocate memory)
- Resolve them to match the rules

Homework

Read Chapter 4

Skim the sections on the languages

There are no problems, but this is testable material