

SICP

God's Programming Book

Lecture-01 Computer Science



Computer Science

Slides Adapted from cs61a of UC Berkeley

About the Course

Parts of the Course

- Lecture: What we are doing now
- Lab, Homework: More practice
- Project: The most important part of the project
 - There will be handouts of all the above parts (in English)
- Online textbook: <http://composingprograms.com>

Asking Questions

- Search the Friendly Web (STFW)
- Read the Friendly Manual (RTFM)
- Turn to the Friendly Python Tutor

<https://pythontutor.com/composingprograms.html#mode=edit>

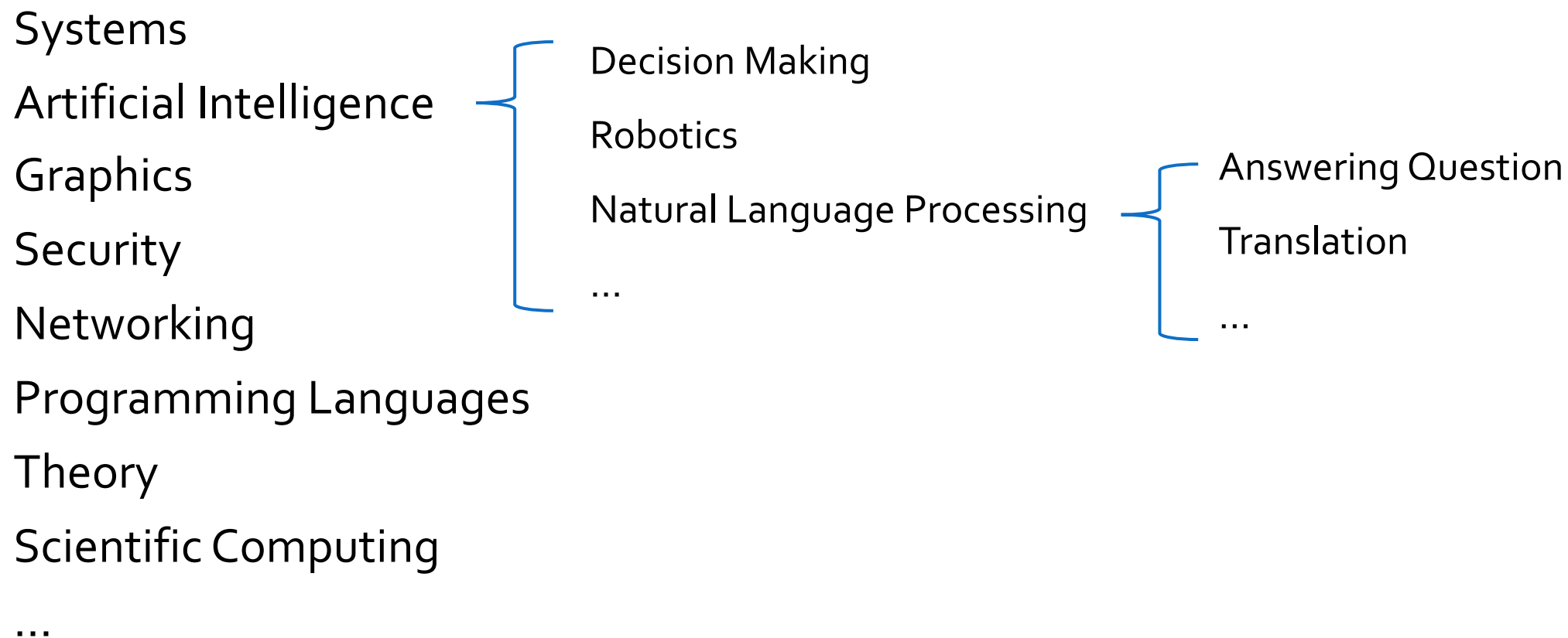
- Take Advantage of the Friendly Comment Section

An Introduction to Computer Science

What is Computer Science?

- The study of
 - What problems can be solved using computation,
 - How to solve those problems, and
 - What techniques lead to effective solutions

What is Computer Science?



What is This Course About?

- A course about managing complexity
 - Mastering abstraction
 - Programming paradigms
- An introduction to programming
 - Full understanding of Python fundamentals
 - Combining multiple ideas in large projects
 - How computers interpret programming languages



What is This Course About?

- Different types of languages: Scheme & SQL

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 SQL

- A challenging course that will demand a lot of you

Functions, Values, Objects, Interpreters, and Data

(Demo)

Thanks for Listening
