Theoretical Computer Science (Bridging Course)

Introduction

Gian Diego Tipaldi
Time and Place

- Lectures
  - Thursday 08:00 – 10:00
  - Friday 10:00 – 11:00

- Exercises
  - Friday 11:00 – 12:00

- Building 51 – SR 00 031 (Thu)
- Building 78 – SR 00 014 (Fri)
People

- Dr. Gian Diego Tipaldi (lecturer)
  - Office: Building 79
  - Office hours: by arrangement (via email)
  - Email: tipaldi@cs.uni-freiburg.de

- Mr. Federico Boniardi (assistant)
  - Office: Building 79
  - Office hours: by arrangement (via email)
  - Email: boniardi@cs.uni-freiburg.de
Website

http://ais.informatik.uni-freiburg.de/

- Go to Teaching (Lehre) WS 2014
- Choose Theoretical computer science

- Syllabus
- Slides
- Exercise
- Additional material
Course Facts

- Course language
  - Lectures are given in English
  - Exercises are given in English
  - Exam will be in English

- Literature
Goal of This Course

- Provide an overview of topics in theoretical computer science

- Give the background knowledge to understand the concepts of computer science
Course Topics

- Formal Languages
- Grammars
- Programs and Turing Machines
- Decidability
- Reducibility
- Time and Space Complexity
- Propositional Logic
- First Order Logic
Homework Assignment

- Available on Thursday
  - At lecture
  - On the website
- Due on Thursday one week after
- Solutions discussed on Friday
- Questions
  - Email to Federico or to me
  - Google Group? Piazza?
Homework Rules

- Homework is graded 1 – 10 points
- Group of max 2 people
  - both names, one submission
- Plagiarism: 0 points
- More than 2 people: 0 points

Exam is on the same topics: Do the exercises!
Exam

- Written exam at the end
- Total points at the exam: 100
- Total points to pass: 50

Rule of thumb:

If you pass 50% of the exercises, you will pass the exam
Questions?