



Syllabus

2007 Spring Term

Compiler Construction TEIXB3E0790-0B,0C

Textbook: Appel, A.W., and J. Palsberg, Modern Compiler Implementation in Java, 2nd ed., Cambridge University Press, 2002.

Instructor: Yihjia Tsai

Web: cherry.cs.tku.edu.tw/compiler/

1. Introduction
2. Lexical Analysis
3. Parsing
4. Abstract Syntax
5. Semantic Analysis
6. Translation to Intermediate Code
7. Basic Blocks and Traces
8. Instruction Selection
9. Liveness Analysis
10. Register Allocation
11. Putting It All Together

Reference:

Alfred V. Aho, Ravi Sethi, and Jeffrey D. Ullman, Compilers: Principles, Techniques, and Tools, Addison-Wesley, 1988.

Charles N. Fischer and Richard J. LeBlanc, Jr., Crafting A Compiler with C, The Benjamin/Cummings Publishing Company, Inc., 1991.

Grading: 30% home works + quizzes, 5% attendance, 30% midterm, and 35% final