Instruction Selection

Course Summary

Introduction to Instruction Selection

Full Compiler Structure

ISA Quiz

Instruction Selection

Instruction Selection Example

Assembly Language Quiz

IR Code Quiz

Translations Part 1

Translations Part 2

Translations Instructions Cost

x86 Idioms

Swap Quiz

Architecture Differences

Minimizing Costs

Tree Representation

Tiles

Tiles Part 2

Algorithms

Ad Hoc Algorithms

Cost Algorithms

Tiling Quiz

Dynamic Programming

Recursive Algorithm

Code Generator Generators

Rewrite Rules

Rewrite Process

Modern Processors