CS 744 - Advanced Compiler Design
Reading Assignment 1

Throughout this course, I will ask you to read several research papers. For each paper, you will submit a brief summary (between one and two pages). Please include:

- the key idea of the paper,

- a brief summary of the justification (theorems/proofs or experiments) the paper gives for the idea,

- your opinion of the validity of the justification and the clarity of presentation, and

- two or three questions you have about the paper.

These reading assignments will be marked on a pass/fail basis, and will together count for a total of 10% of your final grade.

For this first reading assignment, the choice of a specific paper is up to you. The purpose of this exercise is to familiarize you with some of the publications in which recent compiler research appears, and to give you a sense of current research areas. This can also prove to be an excellent starting point for choosing your project for the course. Please choose a paper that is relatively recent (1999 or later), and generally in the area of compiler design.

I suggest spending a fair bit of time browsing through some of the following publications to find a paper that interests you and/or gives you ideas for the course project:

- PLDI: ACM SIGPLAN Conference on Programming Language Design and Implementation

- CC: International Conference on Compiler Construction

- TOPLAS: ACM Transactions on Programming Languages and Systems

- OOPSLA: ACM Conference on Object-Oriented Programming

- ICFP: ACM SIGPLAN International Conference on Functional Programming

Of course, the above list is by no means exhaustive, and you may find an appropriate paper in other publications. For some more suggestions, see `http://www.informatik.uni-trier.de/ ley/db/cc.html`. If you are unsure about the appropriateness of a specific paper, please ask me. Online versions of the ACM publications can be found on the ACM Digital Library (`http://acm.org/dl`), with full-text versions of the papers available to on-campus machines (or often through the author's websites). Proceedings of the ACM conferences are published in SIGPLAN Notices. Proceedings of CC are published in Springer Lecture Notes in Computer Science, and available from `http://www.springerlink.com`. For browsing CC proceedings, you can use DBLP (`http://www.informatik.uni-trier.de/ ley/db/`), which includes links to the original source for the full papers.