Concepts of Programming Languages

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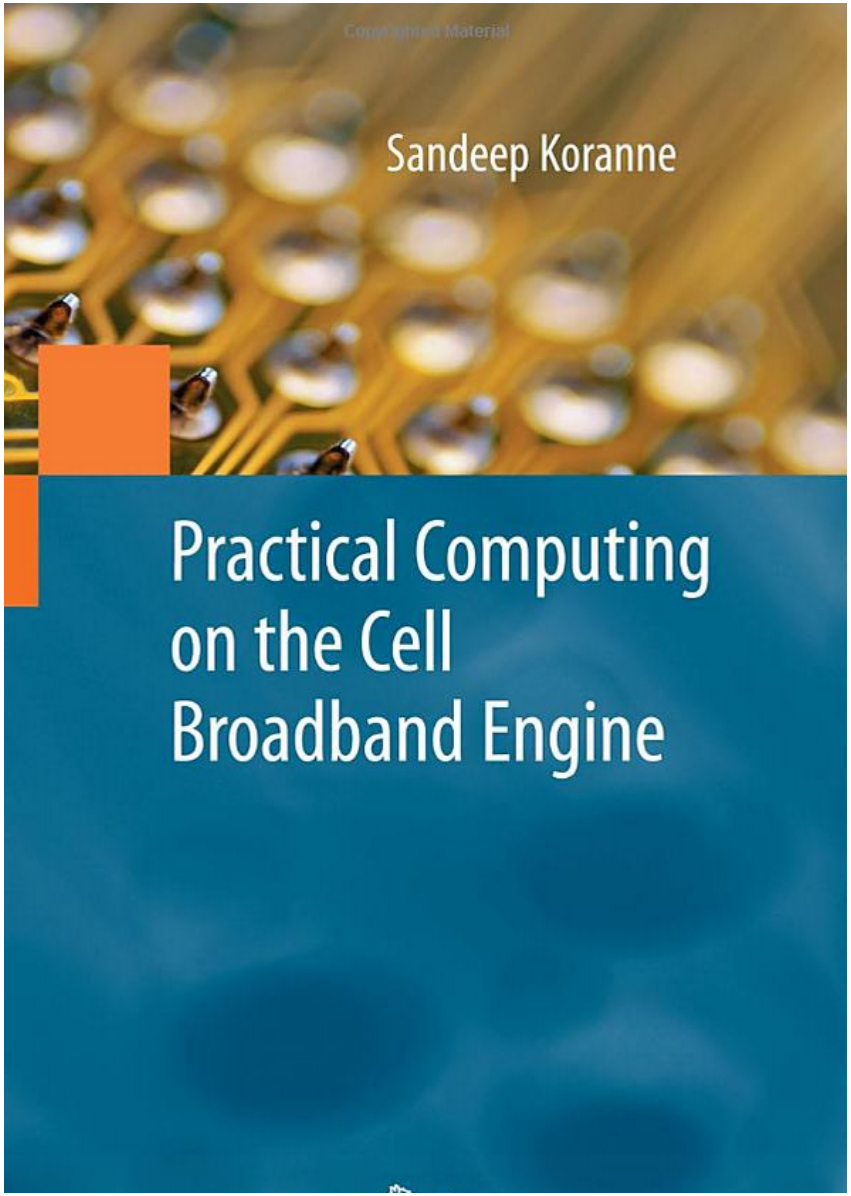
Outline

Instructor Background

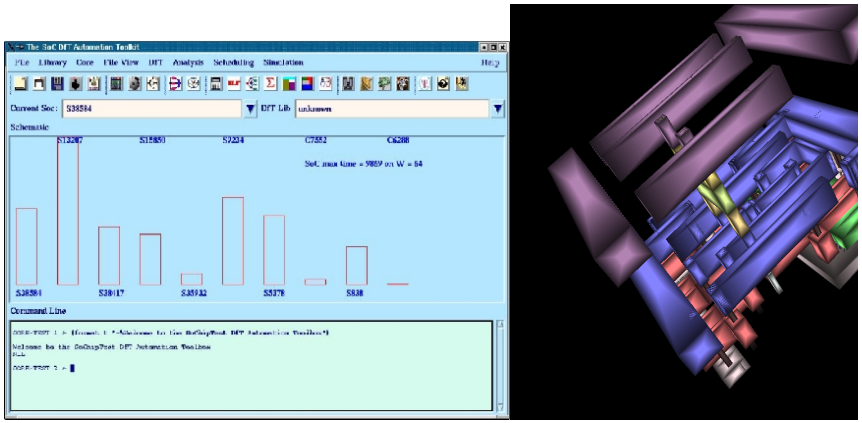
- Chief Scientist at Mentor Graphics
- Research background in algorithms, data structures, parallel programming, compiler optimization and graph theory
- Programming background in Common Lisp, Fortran, C, C++, Python, Erlang, etc

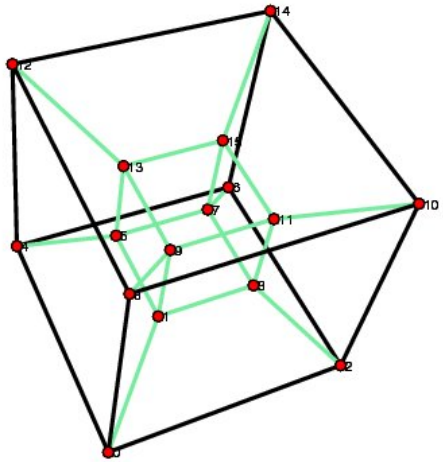
Previous Research

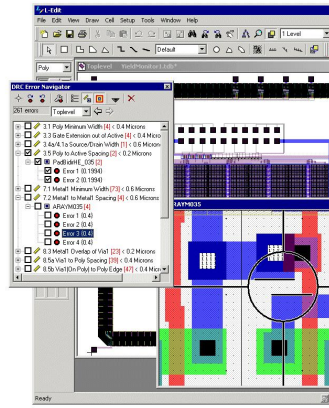


Handbook of Open Source Tools

Programming Experience







Course Outline

Motivation

A simple slide

This slide consists of some text with a number of bullet points:

- the first, very @important@, point!
- the previous point shows the use of the special markup which translates to the Beamer specific *alert* command for highlighting text

Quadratic Equations

Basic form

This is the equation $x = \frac{a}{b}$

Lisp code verbatim

Example (Example code)

This is an example (defun fac(n) (+ n 2))

C++ Code Example

Fibonacci Numbers

```
// Example : fibo.cpp
//
#include <iostream>
unsigned long fibonacci(unsigned long N)
{
  unsigned long f0 = 0;
  unsigned long f1 = 1;
  unsigned long fn = 0;

  for( unsigned int i=0; i < N; ++i ) {
    fn = f1 + f0;
    f0 = f1;
    f1 = fn;
  }
  return fn;
}

int main()
{
  for( unsigned long i=0; i < 10; ++i ) {
    std::cout << "F␣" << i << "␣=␣" << fibonacci( i ) << std::endl;
  }
  return 0;
}
```

(END)