

Modern Physical Design: Algorithm Technology Methodology

Andrew B. Kahng UCLA

Majid Sarrafzadeh Northwestern

ICCAD Tutorial: November 11, 1999

 Andrew B. Kahng
Majid Sarrafzadeh

Introduction

- This tutorial will cover "the latest word" in physical chip implementation methodology and physical design (PD) algorithm technology.
- The target audience consists of
 - system and circuit designers who would benefit from understanding tool capabilities in this arena,
 - CAD engineers (both R&D and support),
 - design project managers,
 - academic researchers.
- Familiarity with basic PD methodology is assumed.

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Overview of the Tutorial

- **PART I:** Technology and Methodology
Context Setting
- **PART II:** Fundamental Physical Design
Formulation and Algorithms
- **PART III:** Interaction with Upstream
Floorplanning and Logic Synthesis
- **PART IV:** Interaction with Performance
Validation
- **PART V:** Linkage to Manufacturability and
Custom Layout