Trends and Challenges in Embedded Systems Research

Christoph Kirsch
Universität Salzburg

FIT-IT
Vienna, May 2007

Trend

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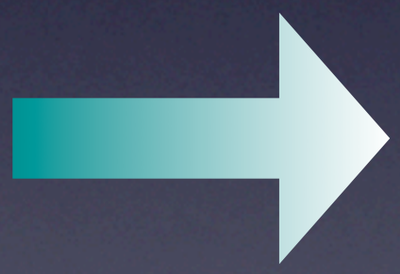
Funding + Policy



Trend

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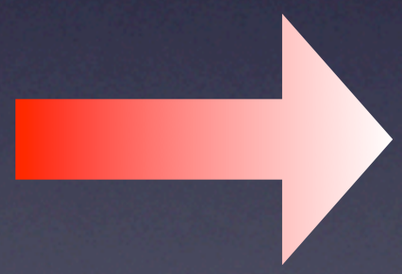
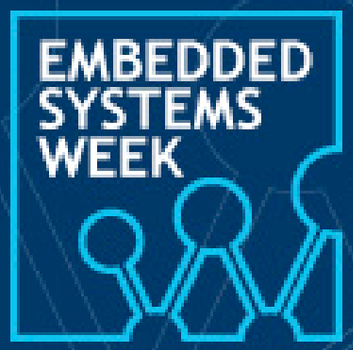
Forum + Interest





Embedded Systems Week
www.esweek.org

- Conferences: CASES, CODES+ISSS, EMSOFT, GPCE, FORMATS

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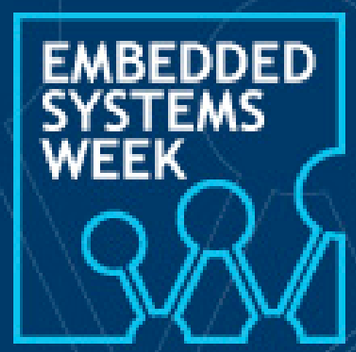

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EMBEDDED SYSTEMS WEEK

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- Contact: Christoph Kirsch, ck@cs.uni-salzburg.at

Trend

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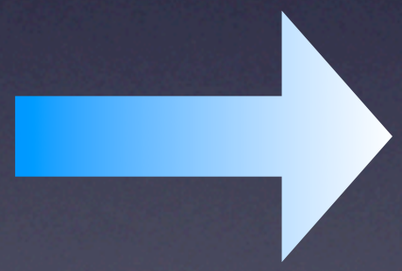
Challenge + Potential



The JAviator

javiator.cs.uni-salzburg.at

Quad-Rotor Helicopter

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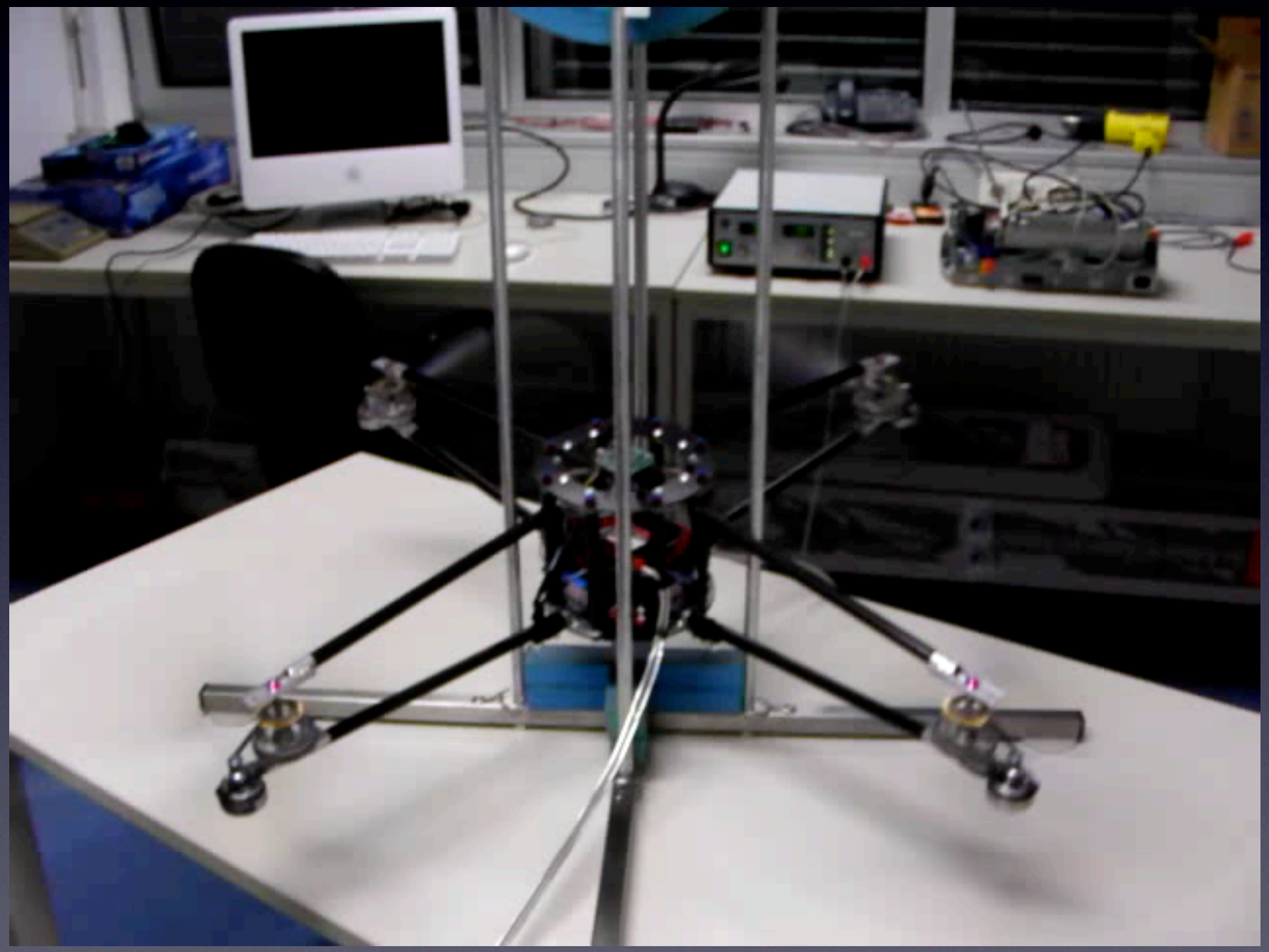
Flight Control



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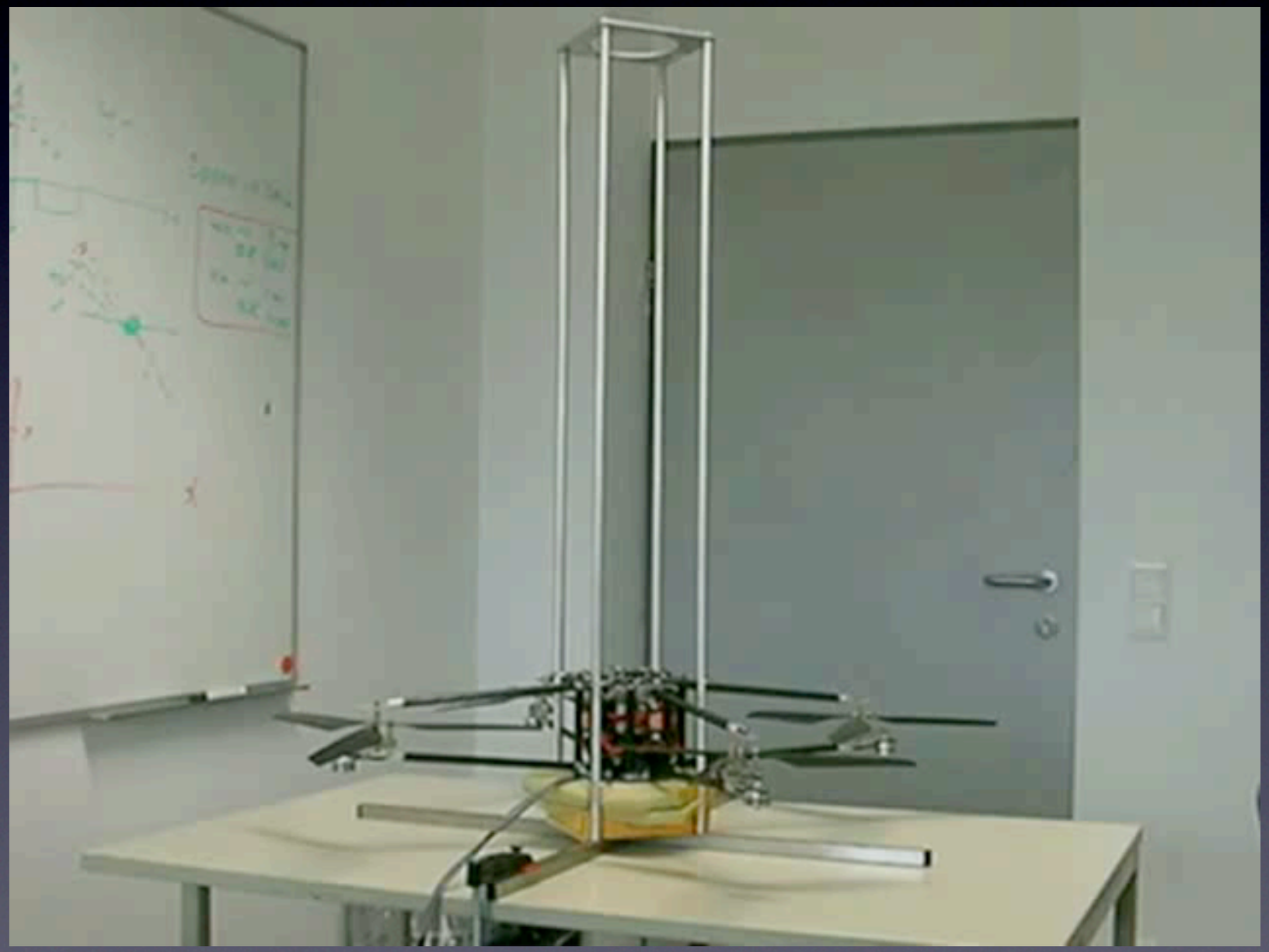
Oops



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Applications

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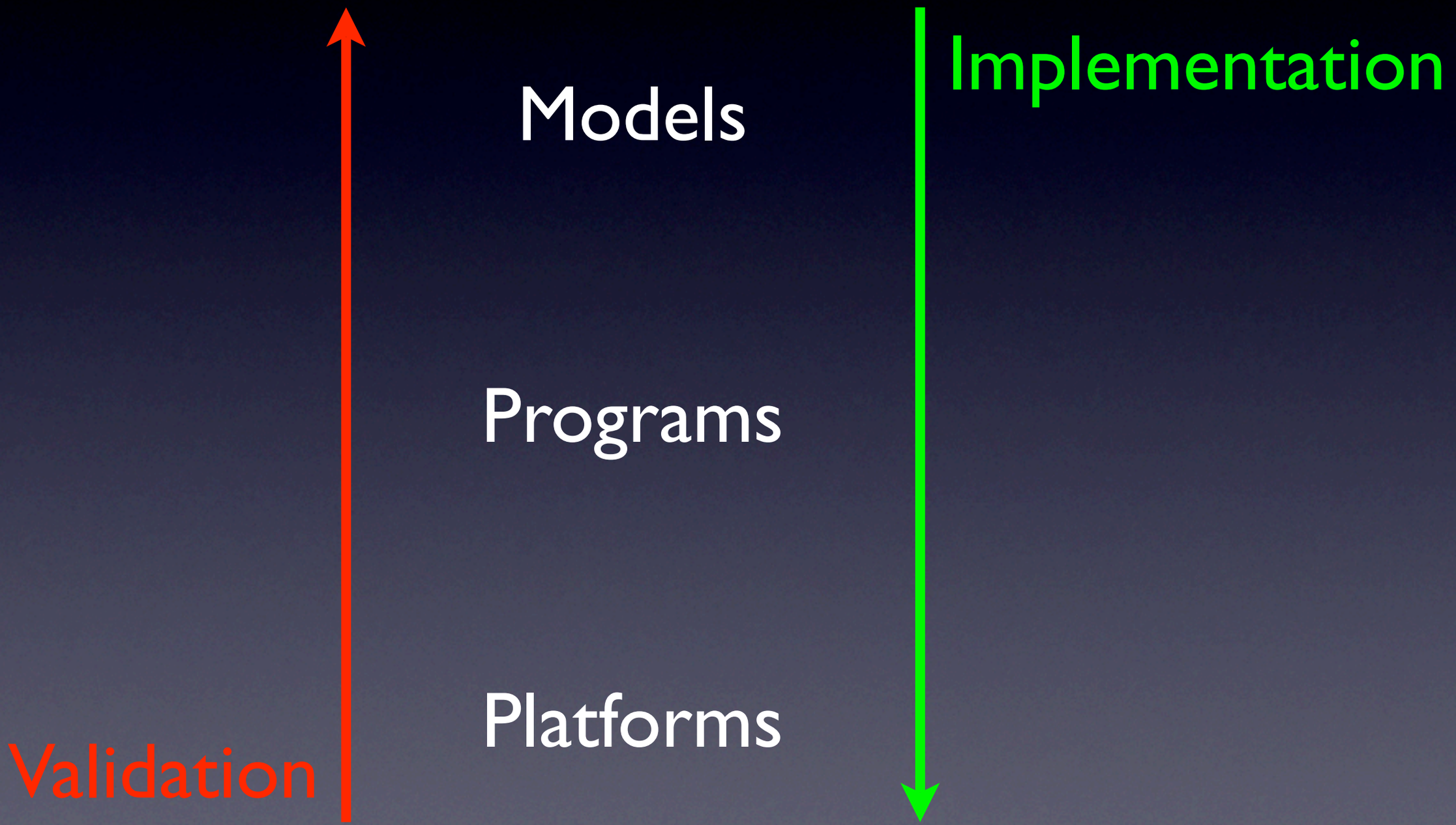
Platforms

Engineering Process



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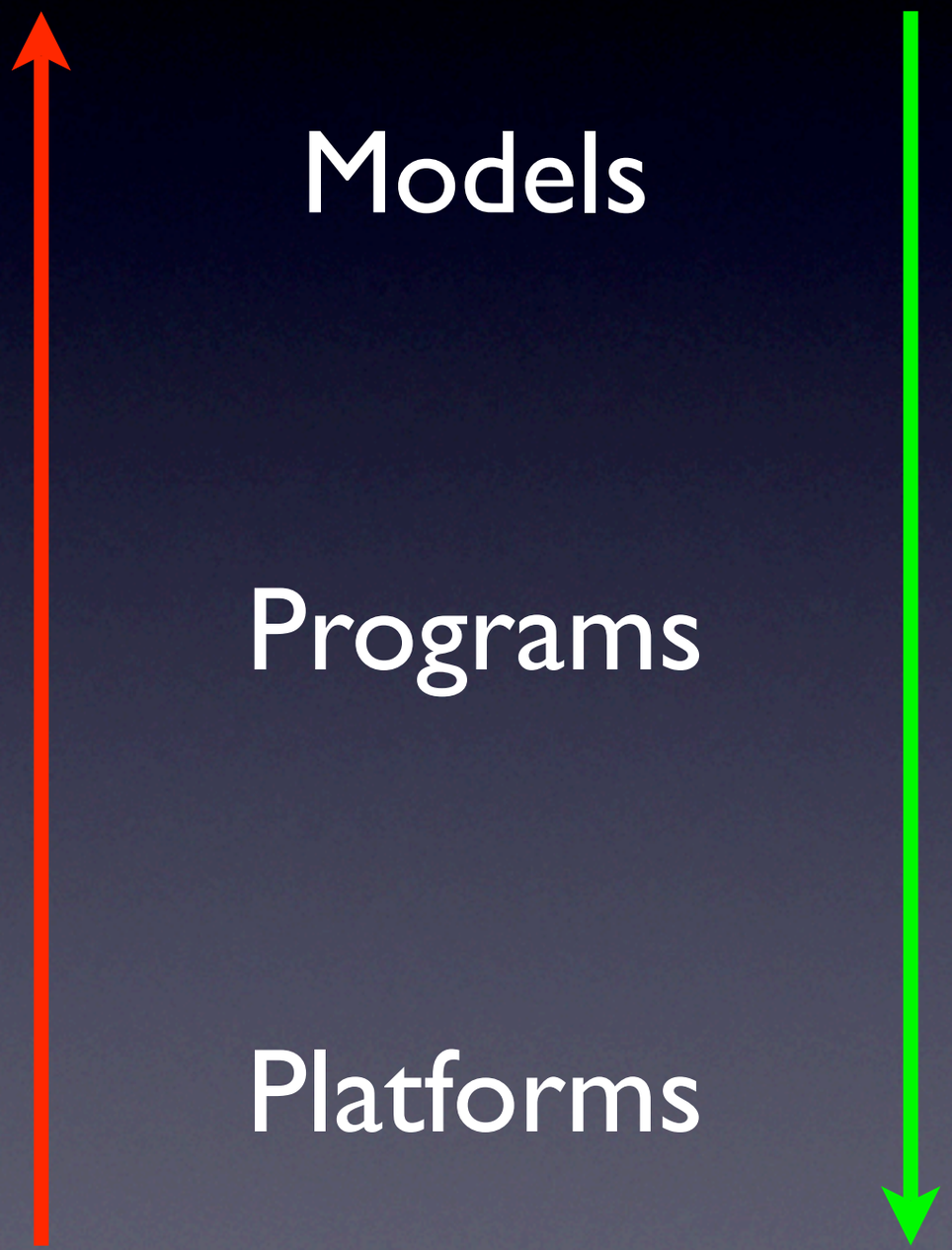
Trends & Challenges



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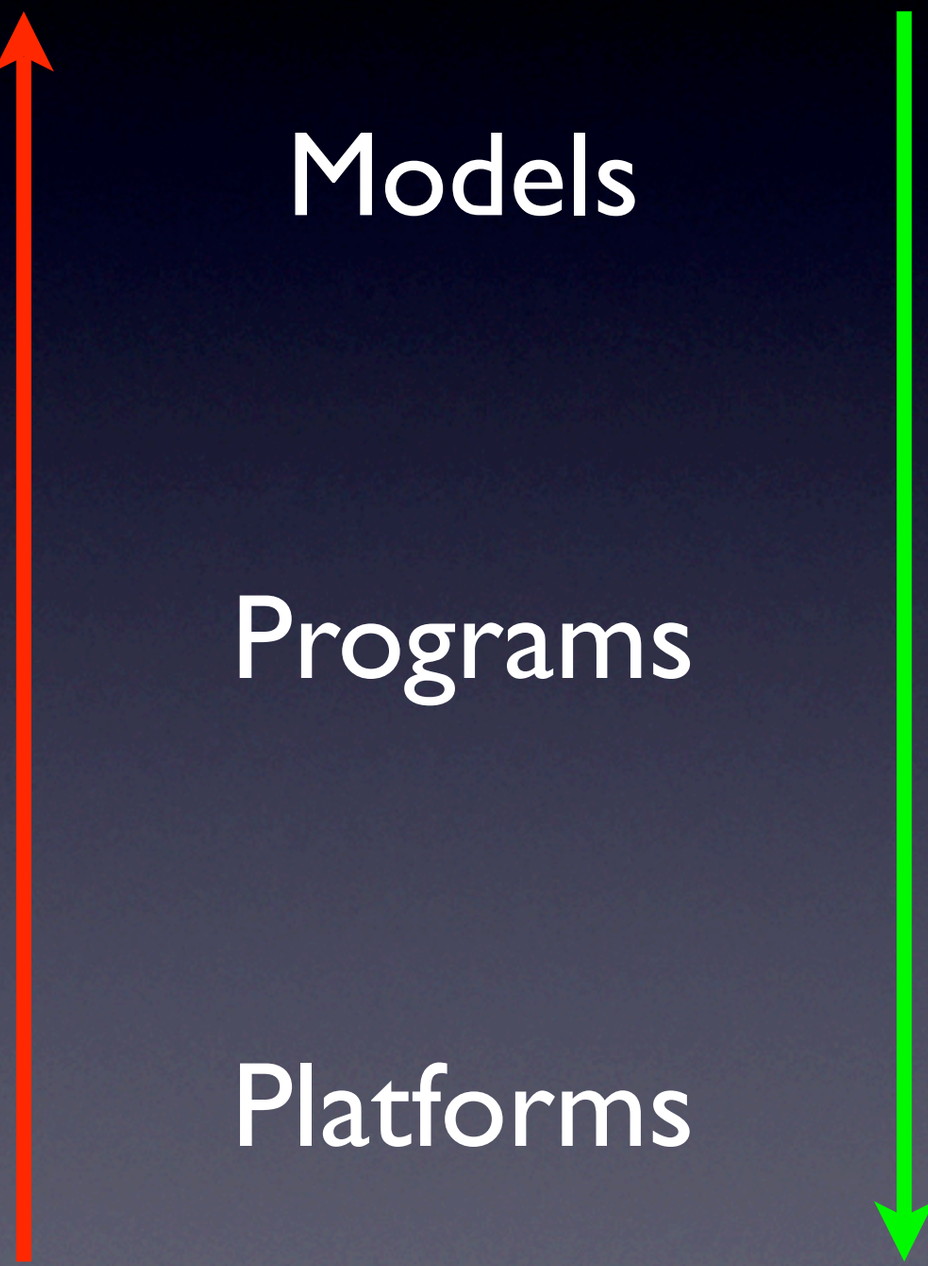
Trends & Challenges



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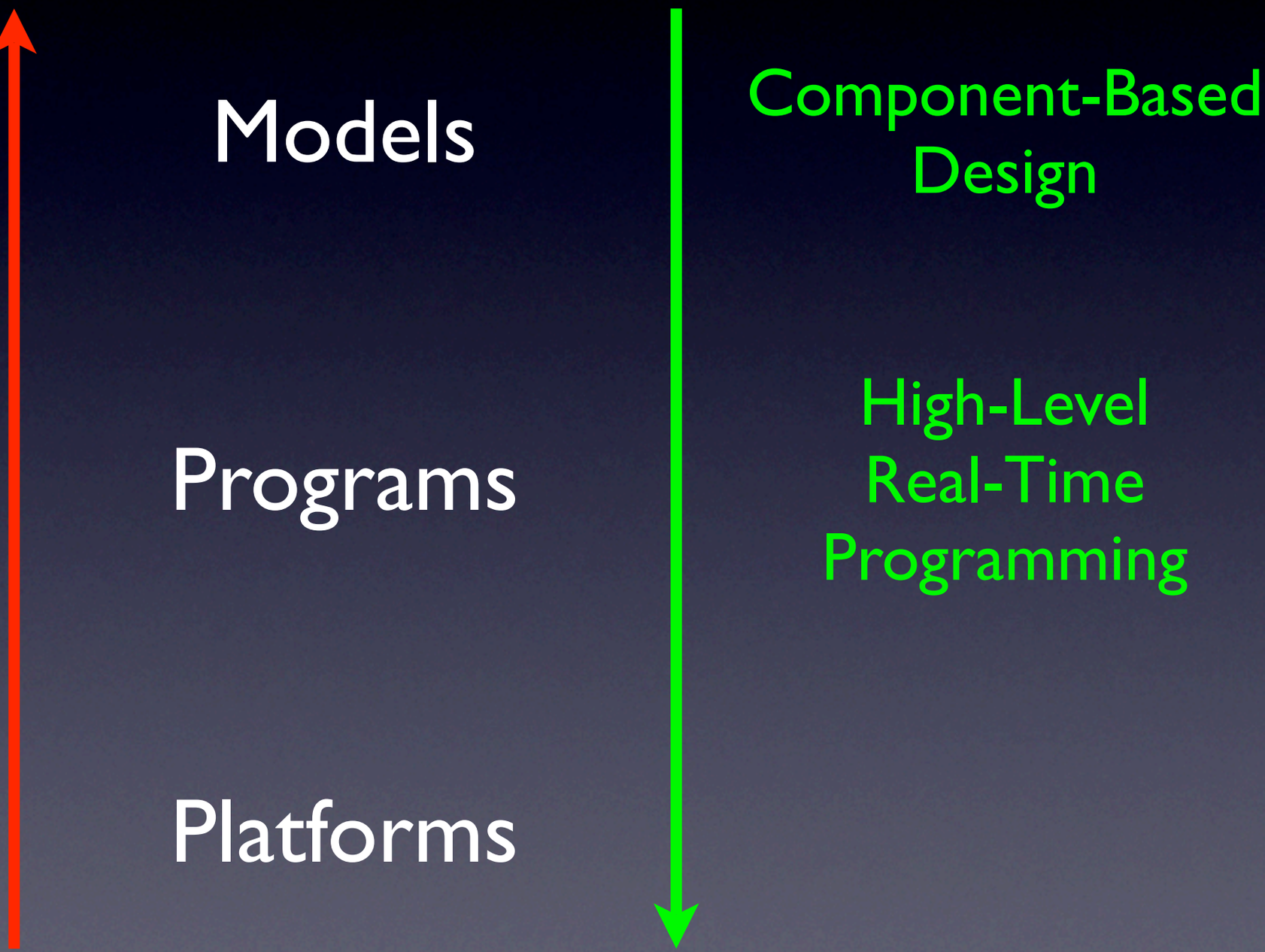
Trends & Challenges



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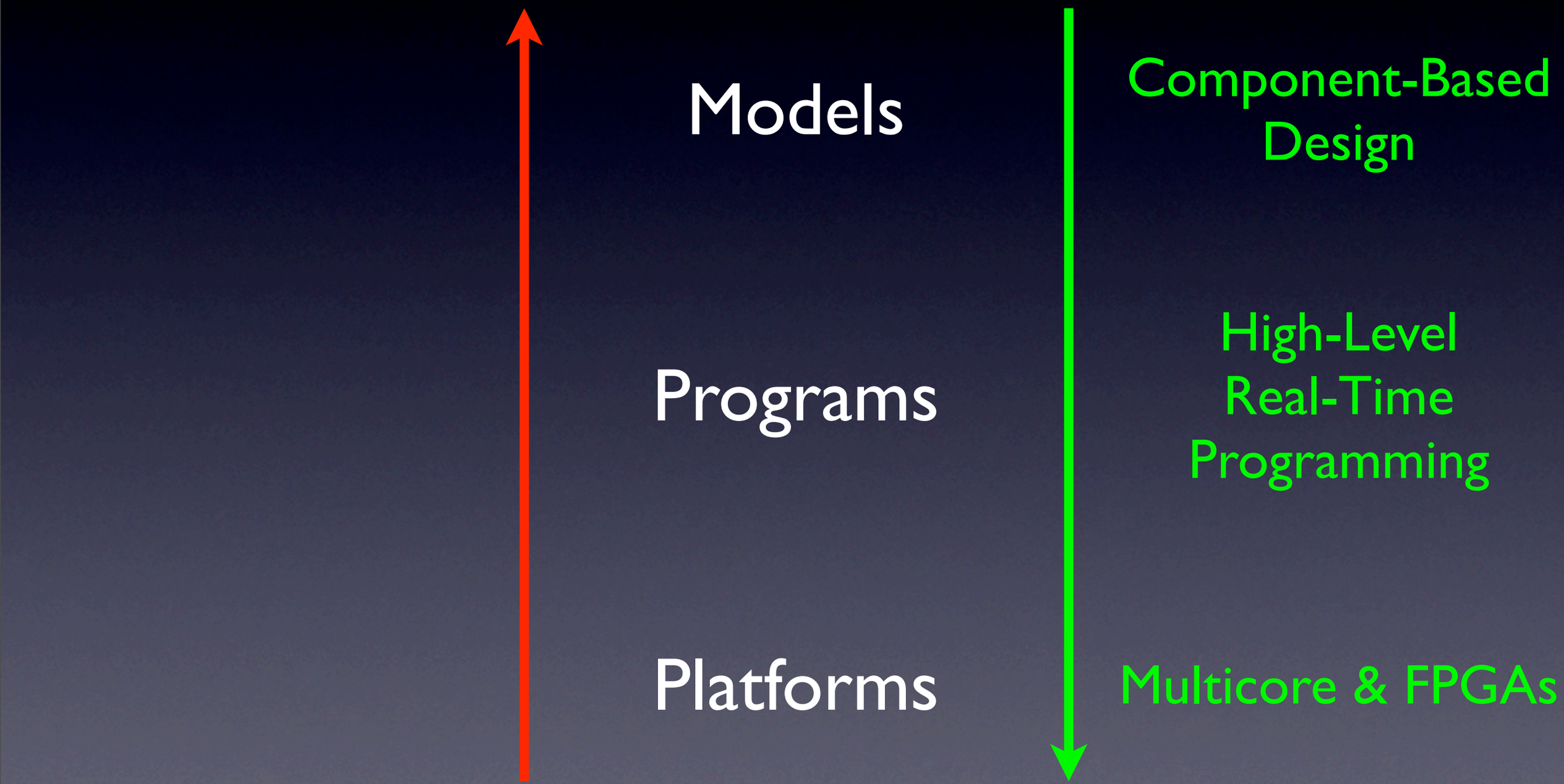
Trends & Challenges



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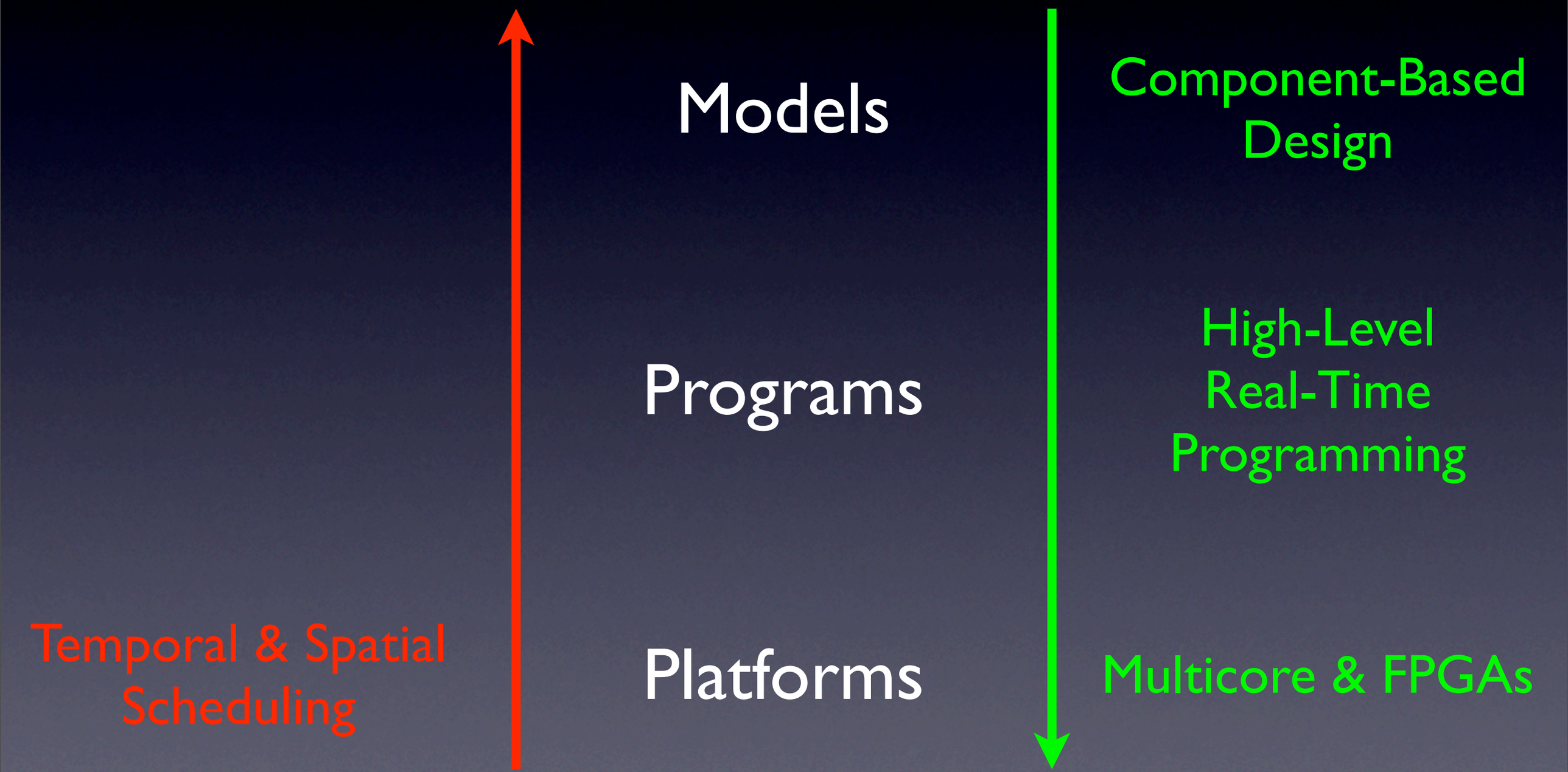
Trends & Challenges



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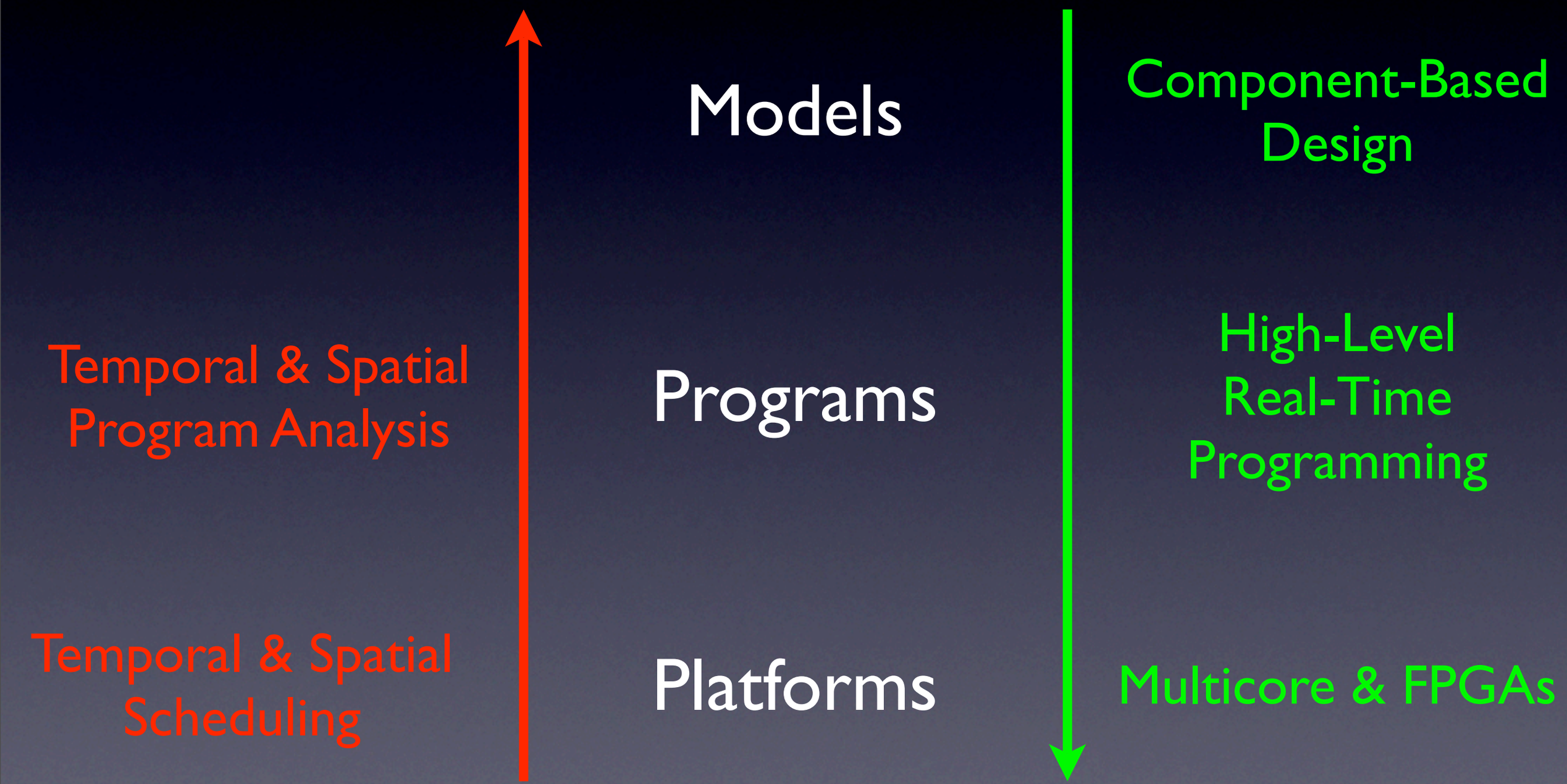

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Trends & Challenges

Analysis of Nonfunctional Properties

Temporal & Spatial Program Analysis

Temporal & Spatial Scheduling

Models

Programs

Platforms

Component-Based Design

High-Level Real-Time Programming

Multicore & FPGAs

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Risk

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Reputation

Risk

US & EU

Reputation

Trend

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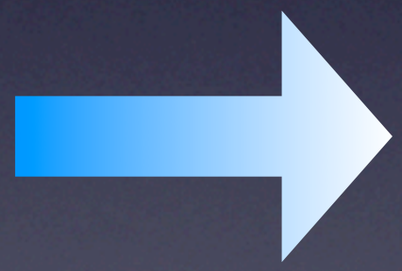
Challenge + Potential



Thank you