FMCAD 2007 Panel

Formal Verification: A Business Perspective

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FV Business Timeline

Industry career prospects then…

Welcome back, Mike. Have a seat.

Let's start by focusing on your "transferable skills". i.e. skills you've learned that might be useful in a "real" job.

For example: writing research papers. Do you know what that says to an employer?

"I know how to type"?

Exactly. How many words per minute?
FV Business Timeline

80’s

1984 Darmstadt Workshop

Logic synthesis
Research: BDDs, Equiv. checking, Symb. MC

90’s

1992 TPCD

1993 CHARME

FDIV Bug!
In-house FV Comb. EC

1996 FMCAD

SAT solvers,
Property specs.,
ABV, Seq. EC, …

00’s

1989 CAV
FV Business Timeline

80’s | 90’s | 00’s

Here we are today ...

The only thing harder to sell than formal methods

http://shemesh.larc.nasa.gov/fm/fm-humor.html
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Here we are today …

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**The research is interesting and all, but I wonder if any of it is going to make a difference?**

**How do I know the things I do are going to matter?**

**I guess you gotta have a little faith…**

**Thanks, but I already get plenty of vague advice from my advisor…**

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Panelists

• Husam Abu-Haimed, Nvidia
• Harry Foster, Mentor Graphics
• Robert Kurshan, Cadence
• Hillel Miller, Freescale Semiconductor
• Prakash Narain, Real Intent
• Rajeev Ranjan, Jasper Design Automation

• Initial Idea: Rajeev Ranjan
• Organizers: Mary Sheeran, Jason Baumgartner
• Moderator: Aarti Gupta
Questions for Panelists

• 1. The current status of acceptance of FV technology

• 2. Who are the users of FV technology (designers, DV engineers, expert FV folks), and how does FV fit in their primary job responsibility?

• 3. What are the key roadblocks/barriers faced by the users of FV?

• 4. What are the challenges in building an FV market (how do management folks determine the ROI)?

• 5. Are there other novel applications of formal technology on the business horizon?

• 6. What are the key areas of research that are most relevant from a business stand point?